

<110> Fisher, Dane K.
Lalgudi, Raghunath V.

<120> NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH
PLANTS

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<213> Zea mays

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10675 U.S. PTO
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 ccccgaggg cacaacgtgg gtcttcgact gtccccttat ggacgacctc gcggtcgccg 240
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cggcgatcgc gcttgttctt ctaccgcgcg gccgcggcga ggagatgcc accgcagcgc 240
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<212> DNA
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 aatatgcaaa atgacccaac gaaattccag gattatctca tcgggatttg gtat 414

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 ccgagggcat gtacacgggc cagttcgtct actgcggtcg ccgcgccacc ctctccatcg 240
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<210> 12
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-D12

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 atgagacaac catagacatt gatggtgatt tggttatgga tttgcgagac ccaaggattc 180
 ttgctgtagc agctgcccac catcgtcttc ttgaggcaga gtatgatggt tacgctagta 240
 cagatgctag tgggtgctgca ttctgccgtt cagctgcgct tattttaatg gcactgttgc 300

ttctaaggca tgcattgtct atgtcagaca acgaaggaaa cgatgatgac gc 352

<210> 13
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-D2

<400> 13

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 gttcttgatt tagttgatga tgaagcttct ggtatgcaag cgcagaaaac tcgatatcac 180
 tggatgaagg tggacaattg gagctatgtc agctacagtt attgatctgt gttcactttt 240
 gaaatactaa aataggaaag taactataca atgctgctaa cttgacaatc attgcatgaa 300
 agcatcatat gctagtgtc cgtgtttatt gctgccctag ccatccggat agtccatcgc 360
 ccgtcgtggg cctcgtggca catcctagat gttttgcccc gc 402

<210> 14
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-D3

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 cgctggcgga caagcggctg ctcatcagct tcgcgcccag gacgctctac ttcgacttcc 180
 tcaagcgcgt gggcgagctg ttcccgggcc cgtcaaaggc cacgcgcgcc tacctgcacg 240
 ccgaggccga catcgaggac gcgctccgcc aggcgggctg gcgcgtcgct aaccgcggct 300
 tcatctccac gcagttctac ttgcgcaagc ttttcgacgc cgtgcccgtc ggctcctcga 360
 cgtagccgtg taggccgccc gccgtgtgcc tgtgtg 396

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 <211> 392
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-D5

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aacgctgcat attttttttt gcctaagcta cagctgtgct acagcaaatt ttgattaaaa 180

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacacaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaa aaaaaaaaaa gggggggggc cccaaggat tccaacgta agtaccgcag 360

aaggaaagtg aaagaccccc aaaagggggc cc 392

<210> 16

<211> 383

<212> DNA

<213> Zea mays

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agaaccatct aacaacaatt tttcctgagg ttaggttaaa gagatacctt gagatgagag 120

gtgctgatgg tggcccatgg aggagattgt gtgcgctgcc tgcattttgg gttgggctgc 180

tgtacgatga ggaatcatta caaagcattt tagacatgac ttttgactgg acacaggagg 240

aaagagagat gctaagacat aaggtaccgt tgactggtct gaagacacca tttcgcgatg 300

gatatgttag agatttagcc gaggaagttc taaaactggc caagaatgga ttggaaagaa 360

gaggatacaa ggaggtccgt ttc 383

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<212> DNA

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<223> Clone ID: LIB143-001-Q1-E1-D8

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 aagcaatacg actgttctcg agagaaccga agaattatgg aaattgaggt tatggcttaa 180
 aaaaaagag attagaatgc gcagcatgca attaaaaggg cggccgctct agaggatcga 240

<210> 18
 <211> 423
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-001-Q1-E1-D9
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 gaccttcccc cagaactatc ccaacagccc gccatcagta agatttactt ctgggatgtg 360
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 aga 423

<210> 19
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-001-Q1-E1-E1
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 cacgtctgct tccgcgcctc cccgcctcct caccgtccgc ccccttttac ctgcctgac 240
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<223> Clone ID: LIB143-001-Q1-E1-E11

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agcgacttca caggccgatac atttttacaa tgtgctgcgc cgggacacca ctcggttat 180
gcaacgttgg cggcctctgc cacatacgcc tttgtcaagt tggagtaaca cctaagagcc 240
gtggacgggt cgtccatcgc gctagttgcg aaacctccgt cgttactctg agtcgccctc 300
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<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-E3

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gtaaacgtgg actttgtcgg tttatggac 389

<210> 22
<211> 364
<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-E5

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aagaaggacc tgcaccggtt cgtcaagtgg cccaaggctg tgcgtatcca gcggcagcgc 240

cgcacacctc agcagcgctt caaggtacca ccggcgctca accagttcac ccgcaccctc 300

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gctg 364

<210> 23

<211> 378

<212> DNA

<213> Zea mays

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gagaagaaat atgagcccac cattggtggt gaagttcacc ctctggattt tagcactaac 120

tgtggcaaaa ttcgctttta ttgctgggac actgctgggc aagaaaagtt cgggtggcctt 180

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ctgacatata agaatgttcc gacatggcac agggacctgt gcagggctctg tgagaacatc 300

cccattgttc tttgtggtaa caaggttgat gtcaagaaca ggcaagtcaa ggccaagcaa 360

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<211> 355

<212> DNA

<213> Zea mays

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<212> DNA
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ctcggtcctc ggcgcggcat ggggtatctt catcacgggg agcagcctca tcggggccgc 240
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tgcaatttat ggtgtaattg tggcaatcat cctcc 335

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<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-F10

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caaatgtgg gagaacagca agtttgctga ctatgattca tctaaggaga aggacaatga 180
tggtgactca caggttgatt tggaatcaaa caagggggat gcaggtcttg acagcaatgg 240
gttgactca actaaggaga acagtggcag ggcacacca actaaacagc accagcagta 300

taagaagaag cctttgctga agagattcgg tggctgcta aaaaagaaaa gcgaaaatta 360
gcataaaacc gtctgatgat aatccttggt ccaac 395

<210> 27
<211> 294
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-F11

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gaccaccacc agacgcccgc gccgcccgtg gtggtggaca cgcattgtca ccaccaggag 180
ggagagcact tcccggcgcc ggcgcctctc ccgcacgtgg agacgcacca ccccgctcgtc 240
gtccacaaga tcgaggacga cgacacgaag attcagaccc caccacaggc accg 294

<210> 28
<211> 229
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-F4

<400> 28

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cacgaacacg aacatcatcg ccggagtgtt aaagatgttc ctcatggact ggttcaacgg 180
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<210> 29
<211> 388
<212> DNA
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<223> Clone ID: LIB143-001-Q1-E1-F5

<400> 29

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 ttcctctagt tcgcgctctg gagaagctca tcgcagcgtc ctccgctccc gggactggct 180
 ccgccctcag gccggtggca gtcgccggcg gcctccgcgg ctacaacacc ggcgctccgc 240
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 gcgcattcga ccccttctcc cttgacctct gggaccctt ccagggcttt cccttcggct 180
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 agaccgacgt gccggggctg aagaaggagg aggtgaaggt ggagctggag gacggcaacg 360
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<210> 31
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<223> Clone ID: LIB143-001-Q1-E1-F7

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 cgggaacgga cttctaactt agagagagcg cgggcgagag aggtcaaccg cagccggagg 180
 cgatggaggt ggtggcgctg gtgagcggcg gcaaggacag ctgcttcgcc atgatgcgat 240

gcatggacta cggccacaag gttgtcgctt tggctaattc tatccccctc gacgacaccg 300
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 cgaaatgcat g 371

<210> 32
 <211> 342
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-F8

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 cagaatgata ttctgagtc aacccttgat gatgctgtga atttactagg tgactactcg 180
 acatggttga gttctagcaa taccgcgaa gcaaatgtat atttggagtg tttctgtgaa 240
 agatgggatg cactggttgc tccggaagaa agggctctgt tagatccaaa tgggcttggt 300
 aatgaagggg agaaactcac cataaaggca ctggaaggct tc 342

<210> 33
 <211> 175
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-F9

<400> 33

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 aataaacata aataaaaaga taggaaatct gcgcgagggg caccaacttt cggtt 175

<210> 34
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-G1

<400> 34

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acaaagacga gaggaagagg ttcccggcgg cgccacgact atgtcgtcga tgatgaacgc 180
gctggcgaaac tggctggcga acccgcgccg caaccgctg gcgcgcctcc acatgcacgc 240
cgtctcctcg cgctcagga aatacggact gaggtacgac gacctctacg acccctactt 300
cgatctggac atcaaggaag cgctcggtag gctgcctagg gaggtggtcg acgcccgcac 360
ccagcgctc aagcgtgcc tggacctct 389

<210> 35
<211> 346
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-G11

<400> 35

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gtgggcatcg cgttcgcggt ggtgcagtgg gtgctggtct ccaagggtcg ggtcaccccc 180
gagcgccgcg cggacggcgg ggccgtgaag agcgggcca gcgactacct catcgaggag 240
gaggagggac tcaacgacca caacgtcgtc gtcaagtgcg ccgagatcca gaccgccatc 300
tctgaaggag ctacatcttt ccttttact gagtacaagt atgttg 346

<210> 36
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-G12

<400> 36

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tggcatccca ctcaactaca ggcacatgga gggctttggt gtcaatacct acaccttgat 180
caacagggat ggaaagcctc accttgtgaa attccattgg aagcctactt gtggtgtgaa 240

atgcttgctc gacaatgaag ctgtgactgt tggaggcacc tgccacagcc atgcgacgaa 300
 ggatctatat gattccatcg cagctgggaa ttaccctgaa tggaagctct acatccagac 360
 tattgatctt gaccatgaag ataagtttga cctttgaccc ccctcaggtc accagaacct 420
 ggcttgagga tatcatcccc ctgcag 446

<210> 37
 <211> 374
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-G2

<400> 37

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 gaacatctgg ctatgatgga gagagttctt ggacctttgc cgtaccatat gcttaagagg 180
 gcagatcggc actctgacaa atacatcaga aaaggacgcc tgaattggcc tgaggggttc 240
 acctcgcggt agagcatgaa agctgtgatg aaattgtcca ggcttcagaa tctggtgatg 300
 caaatgtgg accaggctgc gggagatttc attggtcttt tgcaagggtc cctgaagtat 360
 gaccaacaa gccg 374

<210> 38
 <211> 248
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-G4

<400> 38

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 acccttcgcc ggggatgggc cacctggtct ccatgatcga gcttggcaag atcctcggcg 180
 cgcggggact gtccgtaata attgtcgtcg tcgagcctcc cttcaacacg ggcgctaccg 240
 cgcctttc 248

<210> 39
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-001-Q1-E1-G5

 <400> 39

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 ttgcaatcca ctgagttctg tttgttgaga cgcatagagc tagagtcgac aatgtcgctc 120
 gtgaggcgca gcaacgtggt cgaccccttc tccatggacc tctgggaccc cttcgacacc 180
 atgttccgct ccatcgctcc gtcggcgacc tccaccaact ccgagactgc cgccttcgcc 240
 agcgcccga tcgactggaa ggagacgccc gaggcgcacg tgttcaaggc cgacctcccc 300
 ggcgtcaaga aggaagaggt caaggctgag gtcgaggac ggaacatgct ggcatcag 359

<210> 40
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-001-Q1-E1-G7

 <400> 40

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 acgcgctcgg ctccctggtc tgtcaccttg ccggcggttc cctccaccta gcatgcccgt 180
 caggccctct cttcgccacc ctgccatgga gtcggtccca tgcccaacgc cggccaacct 240
 cacttcccat ggtcgctcct tctccttcc tccctatggt cgacggcctc accttccatg 300
 gcttccaaga tctgctcaac atccattcta gcgcgcaccc ctgcttccgt ttcttggtgg 360
 ccgacgcccc ctccctggaa ctgcccc 388

<210> 41
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-001-Q1-E1-G9

 <400> 41

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 ggtggactgt tcgagaagca gcccgggcag tgctggcacc agcgcagctt caggaaaggt 120
 gcagacgtcg tctccgaagc taccgcacaa gcagtactcc ttcgtgtcgg actccggaga 180
 ggagagcgat cccgataagc tgggtggagag cgtcttggac agcctgcaga aagcacgggg 240
 cggctcgaag ctgcacaact gagcgtctgc tgccatcgaa ttattgtttt tgcaacctaa 300
 cgagtcgtgc ttatgggtgtt ggccatggct gactgtcaag gacagcggcg cctgcaagca 360
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 tcgga 425

<210> 42
 <211> 260
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-001-Q1-E1-H1
 <400> 42

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 tactccacca tccagccaca tgccaggtgg gtacacgccca ctcccgccat ctctccactc 180
 ccagtgcgcg attgtctttt cacatatgga gtagccgggt tcaggctttc ccatgacgag 240
 gtatgtgccg ctctagagga 260

<210> 43
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-001-Q1-E1-H10
 <400> 43

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 aggatggaac gttctcacag gtcgtgtcca acgcctcga catgaagctc agggacgacc 120
 tcgatacgct cacgaagatc aggaaccacc gtggctctcg tcactactgg ggctccgtg 180
 tccgtggaca tcacaccaag accactggca ggcttgaaa aactgttggt gtctccaaga 240

agcgataagc tacatatcta tcgacaaatc tcagatgtac tagtgttggt tcatgttcaa 300
 actgtcttga ctaacggttt ctggtgggac agtttcctga aattatgttt tgccctaggg 360
 taatcttgca gttatggaac ctt 383

<210> 44
 <211> 354
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-H11

<400> 44

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 gaggaagatg ctgctggcca tgacaagctt cgacgacgac gacgctgccg cctcgccctc 180
 ggcacccggt catcacgcc atcctcacca gcaccaccag caccaccacc accaccacca 240
 ccacgcgggc aggcggcgat ggaaccggcg gcaggggacc attccaccac cgtcagatgc 300
 tggcgaggcc gaggcggtcg acccgcgcta cggctctcac aagcggcctg gttc 354

<210> 45
 <211> 231
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-H2

<400> 45

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 tcgggggtctg tcccgggccc atcgtggaac gcaagcccgt attcctgaac ctggtcaagt 180
 tcaccacacc tagtgttgat cactaccccc tctcgtttca gggagtcctt a 231

<210> 46
 <211> 218
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-H3

<400> 46
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gcggcggtg atgtggagta gcgttgcttc gtcggcgggc ttgcctgggc caccagcggg 120
gagtcgcgtg agaatgcctt cgcctcctac ggctagatcc tcgactccaa ggatcatcacc 180
gatcgggaca cggcgacgtc tcgcggttc ggcttcgt 218

<210> 47
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-H4

<400> 47
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atgttgctg ttctaattgcc tgttctctgc gaactatctt tgtctgtttc ggtggaggct 120
gccggcgtga agcactggcc accgggtgct gcacgtcaac ggccaacagg gggcaccgtg 180
caggtgggca gaaacagcca gcgacaacag tagggcacag ggatgtatat ggaccttcca 240
catacactag acttttgcaa gcaaccaaag atactctcag ataataagtt caatgaatca 300
aaaggaaaac tgggtgtctga tgagatcatc ataatctgc tgtcaagacg cctggaagag 360
ggagaagaaa aggggtgaatt ggggttcac cttgatggct tt 402

<210> 48
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-H6

<400> 48
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cccaccatgg cgtcgcaggg atcctccgtc ttcgccgcac tcgagcaggc cccggaggac 120
cccacctcgt gaggacggt tgcctacaac aaggatccca gcccgtgaa ggatcaacctc 180
ggggtcggcg cctaccggac cgaggaaggg aagcccctag tgctgaacgt ggtcaggcgc 240
gccgagcaaa tgttgatcaa taatccgtca cgtgtcaagg agtacctacc aatcaccggt 300

ctggctgaat tcaataagct gagcgctaag cttatctttg gcgctgacag ccctgctatt 360
caggagaata gggttgctac cgtgc 385

<210> 49
<211> 337
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-H7

<400> 49

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cgacgccaag cccaaggccg ccaagcccaa ggcacccaag gccgcgcca agccaagcc 120
ctcgccgaag gcgaaggcca agaccgctgc gaagcccaag gcggcgctgc ccaagcccaa 180
ggccaaggcc aaggccaagg ccaaggccaa gcctgtcgtc cctgccgccg cgtcgcccaa 240
gccccgcggg cgccctccca aggtcgccaa gacctccgcc aagggtccc ccgccaaggc 300
agccaagaag gccggtgctc ctgccaagaa ggggaag 337

<210> 50
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-A4

<400> 50

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tggccactgc ctccccgtcg ctccgcttcc tcggcctgct caagcaagcc gacgacgcca 180
gctcccagtc ccacggtgtc caggagctgg agctcgacta gcgcgacgtc gtctggtcct 240
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ccccgagcgc cagcctcggg aggccgattt ccgccacgtc ccggccactt ctccgccggc 360
agcatggggc tgctccgcgt cctc 384

<210> 51
<211> 434

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-002-Q1-E1-A6

 <400> 51

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 gggttcgtgc aggggcgccg cgcgaagcc gtgttcgcgg atgggtccct gttcagcccg 180
 ttcctgttcg gcaagttctt tgaccagcc gaccgttcc cgctgtggga gttcagaccg 240
 gacgtgctgc tcgccgcgct gcgccgcggc aacgccagga ccgccgtcga ctgggccgag 300
 accgactccg agtactacct cacagcctac gtgccaggtg gaaggagatg cgacgtggag 360
 gtgagcgggg acgcgatgaa cgtggtcgac atcagcggcc tctggcgggc gccgccggcg 420
 gacggccggg actg 434

<210> 52
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-002-Q1-E1-A7

 <400> 52

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 acaagaatcg gtcttgctgg ccttgccgtc atggggcaga accttgccct caacattgca 180
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 cagcgtgcca aggagaagg aaaccttccc gtctacggct tccatgacct cgcgtccttt 300
 gtgaactcca ttcagaagcc acgggtggtg atcatgctcg tcaaggccgg cgcgccagtt 360
 gaccagacca tcgcgacgct cgcagctcac ttggagcagg gcgactgcat catcgaatgg 420
 gggaacgag 429

<210> 53
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-A8

<400> 53

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gccgcgatgg ggatcctcct cgggtccctc ctgcgcgct cgctcgtcct cagttcgctc 180
gtcttgacg tcgcagcggc taaaactata gatccttaca aggttctagg agttgacaag 240
aatgctagcc aacgggatat tcagaaagcc ttccacaaac tttctctaaa ataccacct 300
gacaagaata aaggaaaggg cgcacaggaa aaatttgaag aaataaacia tgcatatgag 360
atcctatctg atgaagagaa gaggaiaaac tatgacctct acgggg 406

<210> 54

<211> 269

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-A9

<400> 54

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gacctccgag acttcacccc gttcagcctc gtggacggtc tcgggagcgc gctgtcgag 180
gtggcgagga ccctgggccc cccgctggag cgctggcgc cgtcgaggct gctgtcccg 240
aagggtcccc aggacaaggc ccggtccc 269

<210> 55

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B10

<400> 55

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acagcaagct cttcaaccga gtcctcctcg acttcctgct gcgcccttcg tccaccgccg 120
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<210> 56
<211> 206
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B3

<400> 56

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tctgaaaaca gttttgctat ttatttaaac aagctgctta attttatttt gatatttagt 180
ataattaata tttgttgact gacgtc 206

<210> 57
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B4

<400> 57

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caccatcacc tcccgcgaga tccagacctc cgtgcgcctc gtcctcccag gagagctcgc 120
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<210> 58
<211> 80

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-005-Q1-E1-D7
 <400> 58
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 gcttcccggg ggccttctca 80

<210> 59
 <211> 446
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-005-Q1-E1-D8
 <400> 59
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 aatgacgtac aagcagcata ttaggtaaac taacaacatc aacctggcga catgaataag 180
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 ctcggtatgg gccagtggct ggttttagcat tatttaaagt tttgagaaat catcgtagtg 360
 tgcccatcct tttcatgggt gctaataac agaaattggt ccatgtcgaa agccttgaga 420
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<210> 60
 <211> 439
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-005-Q1-E1-D9
 <400> 60
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 cagcagacaa gatttcgata gcgacttcat cttcgggtgt gcattctctg cttaccagat 180
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gaaaggtgga gccgatttgg gcaatggaga gactacttgt gactcatacc ggacttggca 300
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gtcaagaatc cttccaagat gaaagaggag taggggaatc aacgaagatg gtattaagta 420
ctacagcggg ctcatagat 439

<210> 61
<211> 140
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-E1

<400> 61

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tcagcagggt ctcacgctga tgtgcggaag cactccggag atgtccttgg gtgtaagtct 120
gttcgcgcgc tttgactgtc 140

<210> 62
<211> 72
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-E10

<400> 62

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agtgctagac at 72

<210> 63
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-E12

<400> 63

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gaatagtccg tttctttctg cattaactca agacacccat gtgcttccgg attttcatgg 120
aaatcgggtc cctgttcctg atccaaaatc caaaggagtg atttatggct tgacacttga 180

tacaagtgag aagcatttag ctcttctata cctagcaaca attcagggtg ttgcttatgg 240
tactcgatcat attgtggagc attgtaatgc tcatggccac aagatagaca cacttcttgc 300
ttgtggggga cttgcaaaga atttcttgta tatccaagag catgcagata ttacaggatg 360
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tgttgct 427

<210> 64
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-E2

<400> 64

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cggctgtacc cggtcaaagg cgccgccgcc ggcacgccga tgaacctcta cttcctgcgg 120
cagatgccgc ggacgtgccc gctgaactac ggcgcgtctg cggtcgcgat gctggacgcc 180
gtgacgcccc gcgcgttcga caacggctac taccggacgc tgcagcagat gaagggcctg 240
ctggcctccg accaggtgct cttcgttgac cgccgctccc gcgccaccgt caaccgcttc 300
gccgccaacc ataccgcctt cttcgcgcgc ttcgccaacg ccatggccaa gctcggccgc 360
atgtgcgtca ataccgccgc cgacggcgag gtccgccggg tatgca 406

<210> 65
<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-005-Q1-E1-E3

<400> 65

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tccgcgacgc cgcgggctac ggcgctgccc tcgccgacgc gctccgcccc cgcggggggc 180
taacgagggg gtcctcgccc ttcgagctcc cccttgaaa gtacggcctc gacggagaga 240

aggcgtgcgc cgagctcctg agcttttccg attccagtgg ctctccacag gtgaccattt 300
 ttgttctgcc agactataag ccacctcttg cagcgtgtgt tgtaaataag gtcttggaac 360
 tgatttcttc tgaagctacc tccactgagc gaactctaata tgcncatac atcacaagat 420
 cgtcaagcta tcatcatg 438

<210> 66
 <211> 415
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB143-005-Q1-E1-E4

<400> 66

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 attccttgaa acaagggccc aaggaacttc aattgcggtc aaaacccaaa tgcggtcggc 120
 ccggaaaatg gccccccctg ggggtgcaatc cccccggac ccacggcaaa aaatgcgcaa 180
 cttcttgagg atgccttcaa tgcaaagtga atcagaagca gcctgcaatc atatcataga 240
 taaatttttg gtgcagttcc agcctcgcgt agtttatgga tgcagtgat aagtatacag 300
 gctgccctta tatagttcca tangagatag aaccctagct tatagtagat cattatatgt 360
 tttatgaatt gtgtaattag gtatctgctt tgcagtgagt ggctatatgg tttat 415

<210> 67
 <211> 418
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB143-005-Q1-E1-D4

<400> 67

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 gggtaatcca attggccggc cgggttggtgc gcgggcgtcc ttgaaggggc atcaanggag 120
 aaagggactc aacaacttca tccgcgacgt ccgcgacgaa ggatacttca natgccttct 180
 ggacgggaac cttttgcaaa cgaaaatcca caatattggc gcaacacttg taggagttga 240
 caagtttggt aacaaatatt atgagaaact acatgacact cagtatggaa ggcatangtg 300

ggtagaatat gcagagaaag gtcgttaciaa tgcattccaa gtgcctgctg aatggcatgg 360
atggctgcac cacatcacag atagcaccgg ggataagctg ctgaaccaga agactgct 418

<210> 68
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B8

<400> 68

ccacgcgtcc ggatacttcg ctgcctgagg agtccccggc accggaggtc ttgctaccgg 60
ctggcggttt cttcttccgt tcttcccaa gtcctcttc cggaggaatc atgatcgtct 120
gcgtcgccgt tgtcgccac cagaacaatc cgctgtacct gcagagcttc acggaggcgg 180
acgacgccct caagctccac cacatcgtca actgctctct cgacgtcatc gacgagcgag 240
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caactgagaa ctacaaagtg tatggctatt tgacaaacac aggggtcaaa tttatcatgg 360
tcacgactga tcttgatgtc aaagatgcag atgcccgaat tttt 404

<210> 69
<211> 441
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B9

<400> 69

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cgctgctgct cagctgcagc ggcattgagc gcgcggcgcg gttgctggaa gaggcgccgc 180
ccaaggagga gcacccacat cctgccgtgc cggagctgcc agaacctgag ctgccgccgc 240
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ttgtccccga gctgccgaag cctgaggtgc ctcatcaggt gccggagcag ccgaagcccg 360
agctgccacc gcacccgaca gccgtccctg agctcccga accctgaggtg ccgcacccag 420
tgccggagct gcccaagccc g 441

<210> 70
 <211> 248
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-C10

 <400> 70

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 tgatgcaact gacctggcta ctatagtttt ctatggatgg ttcattcggc ctcttacata 120
 aggtatcgat tcagacatca tgctggaaga tgttggtgat cggcttctac agttcactga 180
 aacataggcc gcacttgtca ctggtcacat attatttttc ttggtggcat gtattacgtc 240
 agtcaggt 248

<210> 71
 <211> 431
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-C12

 <400> 71

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 aattaggctc cctctacatc tgatccagct aagtagctag ccagcactac agaagggcgt 180
 ggcaagaatc aggagagaga tagcaggggg gctagctagc tgagctcgtg cgacgaagaa 240
 tggccggaat tggcaggaac atggtggcgc cgctcctggt gctcaacctc atcatgtaca 300
 tcacgtcatc cggcttcgcg agctggaacc tgaaccactt catcaacggg cagaccaact 360
 accccggcgt ggccggcaac ggcgcgacgt tctacttcct ggtgttcgcc atcctggccg 420
 gcgtggtggg c 431

<210> 72
 <211> 252
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-C3

<400> 72

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gccgctcatg acgcacccgc cgatgatgat gctgctgctg ctgctcctgc tgggtgcagat 120
gagcccgccg cggtcgagcc ggtcgccgag gttcaggctg ctgctcacga agaactcgcc 180
gctgacgagc cgtgacgctc ctgctcatgc tggtcaccaa gagccctccg gttcaggcaa 240
gtgacgttgc tg 252

<210> 73

<211> 439

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-005-Q1-E1-C8

<400> 73

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tgaaggagtg gaatattgat aaagagctcg ccgcagatag gaaggggtgg aagtgtgcaa 120
ttcagggtgcc agaaccctga ttgatagttt cgcttttcct ccttaatcgt ttgacctttt 180
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cgtttcgttg ttttcggttc tcctttgcct ttgtttccct tttctgttct ttggggggtg 300
agctctgagg ttttcatacg ggggtttcatc tctagcctac cccaacgtgc ttgggacaaa 360
aaggctttgt tgttggtgtt gttgttggtg ttgcatgaca cacttgagaa tgaatgtggt 420
tctttctgtn tgctgggtat 439

<210> 74

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-C9

<400> 74

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tgtatattca gacatcatga gggaagatgt tggatgatagg cttccagatt tcaactgaaac 180

atatgccgca cttgtccatg gttcatatta tcttcttggc ctcagactat tacgtcactc 240
 attacgcca ttagaatcat acgattgtgc ctccggacgt atacactgcc ttgatggact 300
 cacgcataac tctcacatca aattatgtat ctggtcattc tcctgggtcca ccgttcattg 360
 cacctagtta ctagttccca aaaagcattt actacgtaat ggattacttc agaatcactt 420
 acggtgaccc tttaatatat gtcac 445

<210> 75
 <211> 296
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-D1

<400> 75
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 tacgacgcta cctttcatct ttctgttct gcttcgggtcc actattttgt cttccatgat 180
 cttacatcgt aggtcgttgc aggtggcgcc aaagactttg gtgtaatcgt tgatctgtct 240
 ggaactggtc ctatcgtcgg acgtacgaga tttttggtga tccaagggtga acctga 296

<210> 76
 <211> 236
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-D10

<400> 76
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 agagatcgtt tcagcagga ggatttcgag agcgacttca tcttctgtgt tgcacgtct 120
 gcttaccaga tcgaccgtgg cagaggtcgt ggacttaacg tttgggatgg gttcactcac 180
 cgatacgcac agaaggggtgg agctgagttg ggcaatggcg agaggaattg tgactc 236

<210> 77
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-D11

<400> 77

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gtttaccatc ttggtgttat cagctgacga aagcttgccc ttttctgttt cttttcgaaa 120
cacgaaggca atactttctat tccacagctt ttgggttgct tcgtgcactt catcgtcttc 180
agcaacaacc gggcaatgat aataaactg cttttgaaag agaagtcagg attggtagat 240
tgcaacgcca gaaagtccgt gtttctcgta accgtatctt ggattctgca gctaaagtta 300
tgagatggt ctctaataa aaggctgtcc tagaagtga atactttggt gaagttggaa 360
ctggtcttgg tccaactttg gagttttata ctctcttaag ccgtgagctg caaagggttg 420
ac 422

<210> 78

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B6

<400> 78

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cggcgcaggg cagcagcgga tggcgatggc caggctcacc aagatcggga tgctgttcgt 180
gcggtgccgc ggcggcatca gccactcgcc ggaggagtcg gtgatggaca acgacgtgtg 240
ggccgcgggg ctgcgcgtgt tcaacttcat cgaccagaac gcggtgtcag aagaactgga 300
tgccgggcag aacgtggtgg ctgtggcgct ggcggtggca gagtcgtgat ggttcggtgg 360
cgattctttt cagtgggagt aggcctgtag cctgcaactg tacataagac ttgttattac 420
attgca 426

<210> 79

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-D2

<400> 79

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tgcattgcaca tcacatgcac tccaccatgc aaatttgagt tctgctggct atgtcttggc 120
ccatgggtcag agcatggaga gaggactggc ggattttatg cttgtaaccg ctatgagtca 180
gcaaggcaag aaggagcgta tgatgaatct gaaaggagaa gagaaatggc aaagaactcc 240
cttgagagat acacacatta ttatgaacga tgggcagcca atcagtcgtc gaggcaaaaag 300
gcactggggg accttcaaag cctacagaat gacaagcttg aaaggttaag tgacatacaa 360
agtcaacctg agtcacagct gaagttcatt gtagaggcat gggtacagat tgttgaatgc 420
agaagggtat tgaactggac 440

<210> 80

<211> 107

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-D3

<400> 80

cttgtccctc ttggtgctgg gtttgtgctg gttgtcgcgc ttggctgctc gtcgcgtgct 60
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<210> 81

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-A12

<400> 81

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cacctcacct cagcgaggca cactgcacac acacccatgg tgggtggcggc gatgcggcgg 180
ccgtgcgctg tgccagcgct gctgggtggc gcgacgctag tgcttctgct gctgctgctg 240
tcaccgtcga gcgcgcagcc gatgccgtcc ccggcgggcg cgccggggccc cgcgggcggg 300
accgggatcg actcggcgct cctgaactcg ctgctcaaca tgcgggactg cctcccgtac 360

gtgagccagc ggagcacggc gcggcgcccc gacgcgcctt gctgcccgga gctggcgggc 420
ctcgtc 426

<210> 82
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-A2

<400> 82

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atcagaagat ggtgatttcc tgcttgtaaa tcttgtaagt gaagagattc atttgtggaa 180
cataagaaat gatcctgttc gagtcaaccg atacaatggc cataagcaca gccggtttgt 240
gataaggtct tgttttggcg gatctgagca ggcgttcatt gctagtggga gtgaagattc 300
acaggtctac atatggcata gagccactgg tgatctcatt gagactctcg ctggtcactc 360
gggcacagtc aactgcgtaa gttggaatcc tgtgaatccc cacatgctcg catcagcgag 420
cgacgatcac acagttcgta tat 443

<210> 83
<211> 354
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-005-Q1-E1-A3

<400> 83

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gtggtgcaag ggccgaagag gcngcagggc tggagaggtc gccggtatcc gcgccggcgc 180
ccgggccccg cgccggcgcg cttgccgtgg tggactggag gaccgggaag cggcacgagg 240
tcaaggtctc cgaatacagc accgtgcgca ccaccgactt caagaacatt accactggaa 300
aggacgacaa tgggtcttaag atttatgatc ctggttacct taacactgcc cctg 354

<210> 84
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB143-005-Q1-E1-A4

 <400> 84

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gcggggatat tgggtaagca gttgtgatcc tgttctcttg ctcggatgcc gggttactat    180
gacatcgatg acatcctcat ggaggatgag cctatttcag ttgttttcca agtaactgca    240
aatggtgttg gcctgctaga tcctgggtgct gaaagtaact gtgtagacaa gggcgccaag    300
gtggacctcc cattttgggt tgcgcatggg ctgctgtctc tggaacaagc tgtgtcaata    360
naccacacct ccatgcttca cacagaaaac ttggaaggag attcaagctg atgcggcctg    420
tgtggatt                                         428
  
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<210> 85
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-A5

 <400> 85

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aagaactaaa gatgggttcc tacttgggag ttgctgcagc ttctgctaac cctcctcact    120
tcatccatth gtgctacaaa cccactgatg ggaacgtcaa gagaaagctg gctattgttg    180
ggaagggttt aacttttgac agtgggtggct acaacattaa gaccgggcca ggctgcagca    240
tcgagctgat gaaatttgac atgggaggct ctgcagctgt atttggtgca gctaaagctt    300
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tgatcagtggt cacaggcatg aggcctgggt acattgtaac tgcttccaat gggaagacaa    420
ttgaggtaaa taacactgac gcagaag                                         447
  
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<210> 86
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-A6

 <400> 86

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 actggttcgt ctgggtgatg ggcgcagcgg aggtgaaggg caagcggggcg gtggatctca 180
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<210> 87
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-A7

 <400> 87

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 tccctcgacc tctgggaccc cttccagggc tttcccttcg gctctggaag cagcagcagc 180
 agcagcctgt tccccctggt cggaggcacc accaccagct cggagacggc cgccttcgcc 240
 ggcgctcgcg tcgactggaa tgagacgccg gaggcgcacg tgttcaagac cgacgtgccg 300
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 ggccagcgca gcagggagc 379

<210> 88
 <211> 270
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-A8

<400> 88

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gcgattctca atgacggtagc tatcacgacc atctctaata acagaggttaa gccatctcca 180
ttgcccagaca gttggcaact gaaggagatc tttgctacgg gcatcgtgct tggaagctac 240
cttgctctta tgactgtcat tttcttctgg 270

<210> 89

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-A9

<400> 89

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gctgctagtg cttgtatcta ctatcttcat cagggtacttc gcgacacctac tgaagtattc 180
cccgccgccg ctgccatggc caccctcaac cttttcgaac tcttcggcgc cgacgacaac 240
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aaaagccggc cttgggcctg gctggaaagg tgccaacct gccgggaaca acaagttccc 360
gaacaagccc ggtccttcc 379

<210> 90

<211> 274

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B1

<400> 90

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ccacattcag tagctacaag gatcagttca ctcatgcaat caacaacgat ctgcaagctg 120
acccacaga ggagtttcgc tcactactgc gggcaatcat cccgtgcttc acctgcccag 180

acagatactt cgataaagtc agtcaacagg ctcttgagg catgggcact gaatacgatg 240
acgtcaccat ggtcgtaact acgcacaccg acgt 274

<210> 91
<211> 457
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B11

<400> 91

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aacagggtgat tgatggaaat tgggataatg cgggtggttac catgaataca attggccttc 180
aagatgaaaa catcttgaaa tctgcggcat ttttgatatt ggagcaaaaa ttctttgaac 240
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ttggtgttaa tagaaaaaga gtgcatgaac tgtcgacttg tatgatttct tgttcttcac 360
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<210> 92
<211> 432
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-005-Q1-E1-B4

<400> 92

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gccatctaga tcggtctcga tcacacatgc atatgatgct atgcaggcat tatataatgt 180
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tgaaacacgg tgtcgattag cagggccggg tgggtggttg ttgtcccgtt cgcggggcaa 360

CCGGGGCCAC CCACGCATCC GCAGAAACTC TGTATAGTCT TGGATATGAA AAAAGTGGAG 60
CAGTTC TGGA GGAGGAATCA GGGATTATCT TACATAACCC TATGGTGAAA CTTTTCAGAG 120
AACAGGTGAT TGATGGAAAT TGGGATAATG CGGTGGTTAC CATGAATACA ATTGGCCTTC 180
AAGATGAAAA CATCTTGAAA TCTGC GG CAT TTTTGATATT GGAGCAAAAA TTCTTTGAAC 240
TTCTAAAAAA TGACAATGTC ATGGGTGCTA TGAAGACTTT ACGATGTGAG ATCACACCCC 300
TTGGTGT TAA TAGAAAAAGA GTGCATGAAC TGTCGACTTG TATGATTCT TGTCTTCAC 360
AGCAGTTGTT CCTTGTTTT TCAAAGCTTG GAATTGATTC TTCTAGTTCA CGGTTGAAGC 420
TTCTAGAGGA ATTGCAGAAG GTGCTTCCTC CAGCTGT 457

ccaacagcag cgggcagcgg cgcaaaggat cccatatacct atcctgacgg acgccgccca 420
tatatgtcat gt 432

<210> 93
<211> 445
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-005-Q1-E1-A10

<400> 93

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gtcccgcccc atccgcgcgt gccacgcacc tctccttct atctccttcc agacgcgggg 120
acgtcgcgcc acggcggcgg cggcagctga gtcctctgtc agtacgcttc tcgaggtgcg 180
cggactcacc gcattcgtga aggagactgg gcagcagatc ctgcgcggcg tcgacctcac 240
catccgcgat ggcgagattc atgctgattat gggaaaaaac ggctccggca agagcacct 300
cacgaaagtt ctgtagggcc atcctcatta tgacgtaact ggtggtacca ttctcttcaa 360
gggtgaggac ctgnttgaca tggagccaga ggacagatct ctagcaggcc ttttcatgag 420
ttccaagca cctattgaga ttcct 445

<210> 94
<211> 401
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-004-Q1-E1-G12

<400> 94

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ctcggcggct caaaacttct tctctcccaa tcggttctgc ctgggccaaa acagctcttg 120
gaaaccggct tggcaagcag ctatctgttg gcttcttgcc ttagccaaat gaagatcata 180
tgctcacga tctctctttt ttttgttcgg ctgaatctca gagaaaacgt cctgctccct 240
ccaccaggcc gccaggacgc aacgtttctc tctttttgat ctgctgtttt ttttcttga 300
atctggcgct agttccctgg cctagcgcag gcatgtcttt tcatttacca gagatggctg 360

gccgattatg gggcgctgtc tctaaccttt tanaacttgg a

401

<210> 95
<211> 110
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-G4

<400> 95

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<210> 96
<211> 373
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-004-Q1-E1-H10

<400> 96

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acctttgctg gcaggccgcg aaccaaccaa acagctgaag tctgacgacg agccttggtt 120

cagagaaaca gggcactggg tttagagccc ttcggatcta gtattgtcgt tcaccggcgg 180

cgaccaggcc aaaccctaga accttgccaa gatgaggctg ttgcgagcgg cgcagaccct 240

agtctcccgt tcccttttct cagcgcgcca tctaagcggc gcagcctccc ccgccacagc 300

cgccgccgcg ggcgcgcggt ggtgtgcagc gccggcgcca ccgccccgtt cgccgcttcc 360

atcctcgatg gtg 373

<210> 97
<211> 202
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H12

<400> 97

gtccgcccac gcatccgcgc ttggccgcgc aaaacgggaa gtccgcaagg gttgttccgc 60

tggcctcaaa caaggtggtg ccccttttaa tgggaaccaa atataacca accgtggcct 120

ccaagctccg aatgaagggc ctcaaggccc tccccttgga gaacttttcc ccgaaactga 180
 aaacctccgg aacaacaatg gg 202

<210> 98
 <211> 277
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H6

<400> 98

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 ttcgcccgtt gcgccttcgt cttcctgctg gtgctgctgt gcggctttgg tgttctctgt 120
 gggtcggcgt gcttgctggt ctcttggtg gtgtttgcgg gttgtcctgt gccccttgct 180
 cttcttcgtg gttttcctgt gcctgggctg tttctgcctt gcgctgtgtt ctgcttctct 240
 ttggctgtgg ttgtgtgtcc gggctggctg tctgttc 277

<210> 99
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H9

<400> 99

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 agtgagttgg tgaagctgat tgatattctg aacccttcaa acaaacctgg aaggatcacc 120
 ataattacaa ggatgggggc agagaacatg aggggtgaagt tgcctcatct catccgtgct 180
 gttcgcaatg ctggactgat tgtcacatgg attactgatc ctatgcatgg aaacaccatc 240
 aaggcccctt gtggcctgaa gactcgtcca tttgactcca ttctggctga agtgcggtgcc 300
 ttcttcgatg tgcatgacca agaataagc caccctgggg gcgtccacct tgaaatgact 360
 gggcagaacg tgaccgagtg catcggtgga 390

<210> 100
 <211> 301
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-A1

<400> 100

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gttctcattg atcgcccttc tggacaaatc ttgtcagcac tgactgggtca ctcgaagaag 180
gttacaagcg tagaatttgt aggcgactct gatcttgttt tgaatgggtc tgctcacaag 240
agagtcgcta tctggcggca tcctgtggat gggaattatc cctgtgggta taccttgaat 300
g 301

<210> 101

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-G10

<400> 101

cacacaccct gcacgacgca tccgacctcg ccatgtcagg cgcgcgacgg gtctacagaa 60
caacggcgagg acctgcgtgg ccatcgccgg cgctgattac tgtgtcgtcg ctgcggacac 120
ccgcctctct gtaggataca gtatcctcac gcgtgatcac tccaagatct gcgacctggc 180
tgacaaatgt gtactggcat cttctggctt tcaagggtgat attaagggtc tgcagaagaa 240
cctagctgcc agagaattgc tgtaccaaca ccagcataat aaaaggatga gctgccccgc 300
catggcacag ctctctcca ataccctgta ctacaagcga ttcttcccat attacgcctt 360
caatgtgctc ggtgggcttg ac 382

<210> 102

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-E3

<400> 102

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cctttttttg tctccgcttt actgtgttgc tcctatttaa atacgcctaa taataaatga 120

agtaaacaag taaccaattg gatcttttgt ccacgcacct taatttgcac gcacaagtct 180
 aaatggactt atataagtct atggaagagt atctactgtc aattttgtta taggcgaaac 240
 cgcaaaacag actacagtac tgcacattgt tggtttatct tatcaacagg aagccggaac 300
 agaaattgag cctatgggtg acctcaatac tgaagctgag aaaaaacttg gtcggcttgt 360
 c 361

<210> 103
 <211> 358
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-E4

<400> 103

cgcgggccgt accacgcgtc ggcccttctt cttcttactc ctctctctag cacagctagc 60
 gcctgctccc ctctgcctgt gatcatgtct tgcagcagcg gcaagtgcga ctgtggctcc 120
 agctgctcct gtggcagctc atgcaactgc atgtcgctta acgtggagac cgccgccgcc 180
 agcaacatca ataccacggt cctcgccgcg ccgagcatca ctgccagcgc cggcggttc 240
 gaggcggcca ccgagggcgg cggctgcgac tgcagcacct gcaactgcgg caccaactgc 300
 ggctgctcct gctgcagctg caactgacct tgtcatgcga tggcgcacga tagtctag 358

<210> 104
 <211> 366
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-004-Q1-E1-E9

<400> 104

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 cgccgtgcgc ctacagctgg cgaaggtgaa ggaaggggtg gaggtcgcgc agctcgtgga 120
 gaaggtggcc gcggccaccc aggccgccgg ggacgccaaag gtgagcttcg gggagaactt 180
 ttccccggcg cgggccaagg ggtaccagtt cgggatgggtg gcggtgttcg acagcgtgga 240
 ggagctggac gccgtggaag gggacggcaa ggtggaggag gccaaggcct cggtcaggcc 300

gctgctggac gaagtgatgg tcctggactt cgctgctcga gatgctccaa cgcccgcgag 360
cctctg 366

<210> 105
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-F1

<400> 105

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gaatggggggg tttcgtgaag acccataaga ccaatgcgta tttcaaactg ttccaagtga 120
aattcaagag aaggcggggct ggcaagacag actacagggc caggataagg ctgattaacc 180
aagacaaaaa caagtacaac acacccaaat acagatttgt tgtgcgattt accaacatgg 240
acatcactgc acaaatcata tctgctacta tagcgggtga tatggatctt gcttctgcct 300
actctcatga gttgccacga tatggtcttg aagttggtct gaccaactat gcagctgcct 360
act 363

<210> 106
<211> 379
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-F11

<400> 106

cgccaaccg aatacactac caacgcaagt ggtaccagct cgtccaattt cccgccgcaa 60
ctgccaaggg cagctcccc gacttcaaag catatgtgaa gattccttac agcgcatgat 120
gtcaaatcgg atccgtcatc cacatcgtat cgcgtcgttc tgcttgact ctgcttcttc 180
ctctatgtat taataatccc agcagcttga aataataaca atgcatgcat gcatccatga 240
tggaattag aaataatggt tatgtcccca accacgccta cttatgctct cgagttactt 300
atttgctgct gtctctcaac tgcagccta tgtaatatat atacaataaa agattctagc 360
taaaaaaaaa aaaagaaaa 379

<210> 107

<211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-004-Q1-E1-F12

 <400> 107

 tcttgcttat ggggccatct ttccacgggt gattctggtc gcccggcggc cagaagccca 60
 gaacctttgc tggcaggccg cgaaccaacc aaacagctga agtctgacga cgagccttgg 120
 ttcagagaaa cagggcactg ggttttagagc ccttcggatc tagtattgtc gttcaccggc 180
 ggcgaccagg ccaaacccta gaaccttgcc aagatgaggt cggtgcgagc ggcgcagacc 240
 ctagtctctc gttccctttt ctacgcgcgc catctaagcg gcgcagcctc acccgccacg 300
 gccgccgccg cgggcgcgcg gtggtgtgca gcgcggcgcc caccgcccc ttcgccgctt 360
 ccacctctga tggatgatgcc tgccgggggt tccg 394

<210> 108
 <211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-004-Q1-E1-F2

 <400> 108

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 ccgcaagggg tcttcgtacg ccgtcgcggc acttctcgcg ctgcctctg tcgccgccgt 120
 tgcaggggag gtcttcttcc aggagaagtt cgaagatggc tgggaaagtc ggtgggtcaa 180
 gtccgagtgg aagaaggatg agaacatggc tggatgaatg aaccacacct cgggaaaatg 240
 gaatggagat gccgaggaca aaggtattca aacctccgag gattacaggt tctatgccat 300
 ttcagccgaa taccctgagt tcagcaacaa ggataagacc ctggtgctgc agttc 355

<210> 109
 <211> 250
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-004-Q1-E1-F5

 <400> 109

gttctcctgt gggttggttt ggttgttgtt cgggtctctc tcggttttgc tcttttggct 60
gttgtcttcg tcgttgttgt gttggccctg ccgggtttct ttggttgtgc gctcttggct 120
gctttttggg gctcctctcc ttttggctg gtgtcggtag ttgttgtctc ctctgtggc 180
tgtttgctc gtcgtgctgg gtgtcttgc ggtgggctgc tggtttcttc ctggggccgg 240
cctttctctc 250

<210> 110
<211> 230
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-F8

<400> 110

acgcgtctag attggcggtc gtttcgttgt tctttggtgt ctggcggcct ttggctcatc 60
gtccctctc tgtgtgcgc tttgtgtgc ggttgcctt gctcttcttg gtggacttcc 120
ccagtctctc ccttgccgtt ttctatcacc ttgccggagt ttctgcgtc gtggctcttcg 180
gtgcgcgctt gttcatcttt ctctgtgct tggtagggtag tcatctgtcg 230

<210> 111
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-F9

<400> 111

aacatccatg aacatgaatg caatggcca gtaatcttga aggttaactc ctgctgtagt 60
cgggaccttt cagagaaagt cattggagtt tgctttgtag cacaagattt gaccaggcag 120
aagatgatta tggataagta tactaggata caaggagact atgttgccat agtaaagaac 180
cccactgagc tcatccctcc catatttatg attaatgatc ttggttcctg cttagagtgg 240
aataaagcta tgcagaagat taccggtata aagagggaag atgcgataaa caaattgtta 300
attggggagg tcttcacgct tcatgattaa tggctgta 338

<210> 112
<211> 316
<212> DNA

cctcttcttc tgtgtcttct cttggcttgc cctgttgttt gcgtcccgcg tgggtgcgctt 240
cggctctctc gtgggtgcgcg tgtttgttcc tccggtctct ttcttggc 288

<210> 115
<211> 257
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-C9

<400> 115

attgctgata gtcaaatag catcatctta taagggtgtg cactaggata aatttaatcc 60
ttttcatggt gctcactctt aattaattaa gttgctgcaa ttttcatcca ttttgaccga 120
atgtgaatat acttatcaag gaattctttg tatgatcttt aagaacgtgc gcattgtaag 180
atztatgtga cctctgtacg gcatagtata aggtagtttt gcgtggaaaa tcgacagtgc 240
ttactcaaaa ggtgctg 257

<210> 116
<211> 334
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D1

<400> 116

tctccacctc aaatctctat catgtctgca gcacatgtgt cacgctcttt acgagtacaa 60
atagcataaa atgattcttc aagtctttta actggtctca acagtgaaaa gtttttagaga 120
tgggttggtt ttgggtctaa ctcaagatgg agatagtttt agcaaattct aatttttggt 180
atcatggcaa caccaagtaa tgatactagt aggatccaac aggtgattgg gacggtgaca 240
ctggaactta aaaataaggg tattgacatc aaaaatagta aaatactagt gatttttttt 300
gcagccagag aagcacaagt caaggatagt tatg 334

<210> 117
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D11

<400> 117

cccacgcgtt ccaccaagc gtccgcggac gcgtgggtcg gacgcgtggg gcgctgcgtc 60
cccatccaga accatcctcc gctcgacacc ttctctggca gatagcgtcg tcgtgtttac 120
cgcatcgttg ctcacatgg cgctgtagtt gttgccggac ccattgccac cagatgggtca 180
cgacctcttc atagcttcac tccgtccatg gccgtcgccg ctggtgccac cctcccgcag 240
ctgtaactcc ctctcccttc ctcatctcac cgcaggcctc atcacgccct catcaccgat 300
cgttgctggt tctgccctct gttgctggag atcgtgacca tggaactcgc gtcgtcgtcc 360
tagcgctcct cacgatgttg ctgctctagg gcgtcatcct catgtc 406

<210> 118

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D2

<400> 118

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tcgcgtcttc gctgccgtgc ggcgcgtggg tcggccgaag cgggctcgtc cgccgcgcgcg 120
ccgccttctc cgggacacgg ccgcgtttcg cgggcgccag ggcgcagatc ggggcccgcg 180
tgctgccgt cgagcagttc cagcgcagga tggcaacca agctactgtg catgccttca 240
aggatattct gaccagcctc cctaagcctg gaggtggtga atatggaaag ttctacagcc 300
ttctgcact aaatgatcca aggattgata agctgccgta ctccatccgt attc 354

<210> 119

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D9

<400> 119

acgcgtccaa tcaatatgtt cttgttcttg aggatcttgc tcgggaaaag gtaccactac 60
tgctatgctg gaaactatga ctgtggcct aaacttcatg ttcacatca ttctgtcttc 120

gtgtgctttt acagttcagt atgaatatct ggtcaggctt aaacttcaca atgtgttttt 180
atgtaatctc aaagttatgg tcttcaaat agattgtttt aatattcttt tgcaataaag 240
ccatgggtatt ttcagtcgaa ctcttctcct ttaatacata ttagacatat atttgttttt 300
taatgtttat tcatttccaa acttcaacac ttacaagta caccacaaa aagctctttt 360
gaacaatcat agaaatggta tttgtcattt gatggatcag atatgataac ccc 413

<210> 120

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-E10

<400> 120

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tacggacctc aagctcttgg ttactcctga tcttctctag gcgactaggc acaattgccc 120
tctggcaaaa tgccatcagt ttatctttac atccctaaca ttatcgggta ttttaggatc 180
atcataaatt tcattgcatt tgcgggttgc tattccaaca aggctctctt tgctatcctg 240
tacttcatca gctttgtcct tgatggtgtg gatggttggg ttgcaaggaa gttcaatcaa 300
gcatcaacct ttggagctgt gttagacatg gttacagata gggtagcac tgcttgtttg 360
ttggccct 368

<210> 121

<211> 338

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A5

<400> 121

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aactacatcg atcatcagca gcgagccagc cggccgagcg agcagcaccg atggcggcgt 120
acatgcgcgt gacgcaccgc gacgaggaag gcaagaaggt gacggagaag atgccgggtcc 180
cggagacgcg gcgcccggac acggccaagc acttcgagcg caagctggag gagcagggcc 240
tccaccgctt cgagcggcac ccggcgaacg cgccccggg cgtgggcatc ggcgccccgc 300

cgcccaagtc cgggcgcggc ggcaagtaca cctgggag

338

<210> 122
<211> 273
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B10

<400> 122

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cgacctcacc gactacctca tgaagatcct gactgaacgc ggctactcct tcaccaccac 120
tgctgagcgg gaaattgtca gggacatgaa ggagaagctc gcctacattg ccctggacta 180
cgaccaggag atggagactg ccaagaccag ctcttctgtt gagaagagct acgagctgcc 240
tgacggacag gtcacacca ttggtgctga gcg 273

<210> 123
<211> 379
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B11

<400> 123

acgcgtccac ccaagcgtec gccacgcgt ccgatcaca ttcacacagc gaaccgtgaa 60
tccaacacag caacatgcag agcagcgatc cgacatccga tagatggacg cggatgatgtt 120
cgggctggag actcccttga tggcggcgct gcagcacctg ctggacgtgc ccgacggcga 180
cgccggcgcg ggcggcgaca acaagaccgg cagcggcggc agcgccacgc gcacctacgt 240
ccgcgacgcg cgcgccatgg cggccacacc ggccgacgtg aaagagctgc ccagcgcgta 300
cgcattcgtg gtggacatgc cggggctggg cacgggcgac atccgggtgc acgtggaaga 360
ccatcgggtg ctggtggtc 379

<210> 124
<211> 357
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B12

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<400> 124

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caagtaccag ggacttgaga tcacgcaggt ggactgcga cgggaggcaa tgaggctgat 120
ccacgcggaa gacaagaacc tcaaggccga ggactcagcg tgggagctga agaagaattc 180
ggcaacggcg tgagcaccat ggtcctcgtc tacaacgcca ccggggccag cctgagcctg 240
gtggacgacg ggaaagactg gatgggctcc gtctacagct cgccgatccc ggacaccttc 300
cacaacgggc agtggatcgc catcctccac gtcaagcccg gctcgtggc gcagggc 357

<210> 125

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B4

<400> 125

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agatccaacc caagtccga cgccgcgggc gagaccgatc agatccacct cagccgtctc 120
ggatggcgtc agcatcgacg gcggtgcgga tgctccccga cggcggcgct gacgacgagg 180
agcgggtggct cgccgagggc atcgccggcg tccagcagaa cgctttctac atgcaccgcg 240
ccctcgattc caacaacctc aaggacgcac tcaagtactc ggcgagatg ctctccgaac 300
tgcgcacctc gcgactatcg ccgcacaagt actacgagct gtacatgagg gcgtttgatg 360
agatga 366

<210> 126

<211> 392

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-004-Q1-E1-C10

<400> 126

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acgtcgtgct cgtcggtggc tccacccgca tccccaaggt gcagcagctg ctgcaggact 180
tcttcaacgg aaaggaattg tgcaagagca tcaaccccga cgaggctgtg gcgtacggcg 240
ccgctgtcca ggctgccatc ctacgaggcg agggcaacga aaaggtacaa gatctgctcc 300
tgctcgacgt cagccactg tctctcgcc tggagactgc aggtggcgtc atgacggtgc 360
tgatcccag gaacaccacc atcccgacca ag 392

<210> 127
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-C11

<400> 127

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gcgcagcacc gctcggaag gacgtgatgg agggagtggc caagattttc cagaagctgt 120
gattgcccag gggtacggaa tgactgaaac ttgtgggatc atatctttag agtaccaga 180
aaaaggacaa attcgtcaat ttggttcaac tggagcactt gtctcaggag ttgaagcaaa 240
aattgttgat gtagaaacat tgatatgtct gccaccaa atcaactaggag aaatttgtgt 300
tcgaggaccg aacataatgc aagggtattt caacaatgtg caagctactg aatttacaat 360
caagcaaggg tggttgcata ctggtgat 388

<210> 128
<211> 344
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G4

<400> 128

cccgcccgga aacacgcgtc caacgcagtg gaagaagcat atcgaggagt cgattgcggt 60
gacggaggtc cattcgagc agttgtcgtc tgtaatgacg aagtagtagt cagctgccat 120
aacatgggtc tgaagcacac tgaccctact gcgcagtctg aagtaactgc aattagagag 180
gcttgcaaaa agcttgggaa aattgagctc tcagactgcg aaatttacgc gtcctgcgag 240
ccatgcccaa tgtgctttgg tgcagttcat ctctcccgaa tcaagaggct ggtttatggg 300

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<211> 69

<213> Zea

<223> Clone ID: LIB143-003-Q1-E1-H10

<400> 129

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gaaaggggtt . 69

<211> 104

<213> Zea

<223> Clone ID: LIB143-003-Q1-E1-H12

<400> 130

gaagctacat tcctaaaacc atctgcttca gccttcagcg agccccaagt ttagtcggcc 60

gatcgattac tgaagtagta tggcctcgcc aagacggccc tcag 104

<211> 329

<213> Zea

<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-H2

<400> 131

cgtccaacat aaggaccact caaagttcaa aagaaaggggt gaagatctct tttatgagca 60

caccctgtct ctgaccgaag ctctatgtgg gttccaattt gttcttacac atctggacaa 120

caggcagctt ctgatcaaat caaaccgccg cgaagttggt aaacctgacg aattcaaggc 180

gagaaacgac taggggatgc ctatttacca gatgcccttc atgaacggga agctctacat 240

tcatttcaca gtggagttcc ccgactcgct ggcgccagag cagtgcaagg ctctcgaqtc 300

ggtacttccg ccaaagcctt cgtccaagc 329

<210> 132

<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G12

<400> 132

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cacaatatac ctgagatact tctgagtaag atactccctg tcatgctgtc ctctgtcgag 120
tctgcctcac ttgagtttcg atcagtagct gctctatcca taactgtttc gtgacatctg 180
agtgcctaac ttactatcga cgacttgact atcattgtca tgctatctgc tgtcaatcat 240
tgtgctacca gtgaatgtcc tatgcgacaa agtcatcagt atgagaaatc tcagtctgct 300
gaatcagtgt ctgctcaaat tgttcatcaa gtagtatttc cacatgtagc aactgaatgt 360
accgacactg atcgtacatt acgttcactg atcatattat caatgctcat atcacia 417

<210> 133
<211> 377
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A11

<400> 133

caactccgcc ctctcgcaat catcgccgac gaggacaccg tcactggcctt cttgatggcc 60
ggcgttggca atgttgatct ggcgaagaaa accaattacc tcctcgtcga caacaagacg 120
acagttaaac aaatcgagga cgcgttcaaa gaatttactg caagggagga tattgctatt 180
gtgctcatca gtcagtatat tgccaacatg ataagatttc tgggtgatag ctacaacaag 240
ccagtccctg ctattctgga gatcccatcc aaggaccatc catatgatcc agcgcacgac 300
tcggtgctgt ctcgagtga gtagtctctt tctgcggaat cgggtggcgtc tgataggcga 360
tgaaggcatc cttgtgt 377

<210> 134
<211> 287
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A12

<400> 134

ggaggaggcg gaggggggatg ccatggggcaa ggacgtcgtg gtccagagcg gcgcggggcgg 60
cggggatttc gccgccaagg agtacactga cccgccgccg gcgccgctgg tggacgctgc 120
agagctgggt tcgtgggtctc tgtaccgcgc ggtgatcgcg gagttcatcg cgacgctgct 180
gttcctgtac gtgacggtgg cgacagtgat cgggtacaag caccagacgg acgcttctgc 240
gtctgcgtcg ggggccgggg cgcacgccgc gtgccggcgc gtgggcg 287

<210> 135

<211> 258

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-004-Q1-E1-A2

<400> 135

gtgcgtgcct tgggttgctg gtggcgtgtn gtgggcttgt gcgggtgctg gcgcgccggcc 60
cgggggcccc gctgggcgtt gcgtgcttgc tgggtggggg ggctgtgggg gggtttgttg 120
tggggggggc gtttgggcgc gtcggtgcgc ctgtgctggt gcgtgtcgtg ggtcccttgg 180
tgacggcctt ggctggggct ggcgtggctg ctggtggtgt gcccgttgtt ggggttgcg 240
gctctggttc tcgtgttc 258

<210> 136

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A3

<400> 136

acgcgtcgga ccacgcgtcc gcccaagcgt ccgcccacgc gtccggttat gaagagtggc 60
aagtacactc tcggctacaa gaccgtcctc aggactctca ggaactctaa gtcgaagcta 120
gtgatcatcg ctaacaactg cccgcccctt cgtaagtctg aaattgagta ctatgctatg 180
ctggccaagg tcaactgtcca ccacttccat ggaaacaatg tcgaccttgg aactgcctgt 240
ggtaaatact ttcgggtctg ctgcctcagc attattgatc ctggtgattc tgatatcatc 300
aagactacac cgggtgagca gtaaagaagc ccctgcagta gggggatc 348

<210> 137
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E12

<400> 137

gaccacgag tcaacttaga gccaccaacc cgggatgcag ccactacgc gggaaatgca 60
ggccatggcc gccgccggcc agcacatctc cctcgacgac ctccgcgcgg cagcaggcgg 120
cgtgcacgac gacttcctgc accagatgcg cggaggcctg ccgccgtctg catggccgga 180
actgtcgtcc gcggcaggag ggaaggcgcc ggatggcggc gcgcatgcgg agcacatgca 240
gcaccagccg cagcactttg gtgggggtgc ggtcctgtac cacgattccg ccttgctggc 300
ctctcggtc cggcagcacc aaatcagcgg ccgccgtgg gaggccgtga agcagatggt 360
gctgcagcag cgggcctatc agaggcacga acaccatgtg ttgcttcagg gcaagggg 418

<210> 138
<211> 332
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E5

<400> 138

acgcgtcgac aacaggctgt tccaattagg cctgaagaaa tacggcaagg gggactggag 60
gaacatatcg cgcaactacg tccagacgcg gacgccacg caggtggcca gccacgcgca 120
gaagtacttc atcaggctca actccggcgg caaggacaag aggaggtcca gcatccacga 180
catcaccacg gtgaacctga cggacgacga gcgggcgccc tcgccgtcgc ggtcctctct 240
gatcaccacc accaccagcc atccaaacgc gccggctccg gccgcagtgg tgatacgcg 300
tcccttctcg tcctcgtcgg cggcggtggc cg 332

<210> 139
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E9

<400> 139
gcaatccact gagttctgtt tgttgagacg catagagcta gctgctagcg tcgacaatgt 60
cgctcgtgag ggcgagcaac gtgttcgacc ctttctcgat ggacctctgg gatcccttcg 120
acaccatgtt ccgctccatc gtcccgtcgg cgacctccac caactccgag actgccgcct 180
tcgccagcgc ccgcatcgac tggaaggaga cgcccagggc gcacgtcttc aaggccgacc 240
tccccggcgt caagaaggag gaggtcaagg tcgaggtcga agacggcaac gtgctggtca 300
tcagcggcca ggcgagcagg gagaaggagg acaaggacga caagtggcac cgcgtcgagc 360
gcagcagtgg c 371

<210> 140
<211> 129
<212> DNA
<213> Zea mays
<223> Clone ID: LIB143-003-Q1-E1-F11

<400> 140
attcccggtc agaccacga atcaaggctg atgcccggag cgaacttgaa tccatcacac 60
tgcgctcacc ttcatatgat gcaacatccg cgaatgcac tgtattgcaa aaatagacaa 120
atgcttcgc 129

<210> 141
<211> 340
<212> DNA
<213> Zea mays
<223> Clone ID: LIB143-003-Q1-E1-F2

<400> 141
ccggggccgat cagcgctcgg cctatctctg aaactactgc tatttttgca ggtgttgatg 60
tcaccaacga gcccatcgga gttttgccta ctgtgcacta caatatgggc ggtattccaa 120
caaactacca tggggaggta ctggatatca acggtgataa tccagatgct gttgttcctg 180
atctaattggc tgctggtgaa gcagcctgtg catctgttca tggtgcgaa atgctacgct 240
caaattcgct tcttgacata cttgtttttg gcagagcttg tgcaaacagg gtagcaaata 300
tttctaacc acgtgagaag cagaaacctc tggaaaaaga 340

<210> 142
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E11

<400> 142

cccacgactc agggacagcc actgcaactc ctcccaaadc ctcccacccg gtttagccgg 60
ctccgctgcc accgccgcga ctccacctct gtcgccacca tggtaagtc caaggccatc 120
agggtccacg agctgggcgg ccccgagggtg ctgcggtggg aggaggtgga ggtcggggag 180
cccgggtgaag gggagatccg catcaggacc accgccgtcg gcgtcaactt catcgacatc 240
tacttttcgga aggggggtcta cgccgcgccc accatgccct tcaccccagg aatggaagcc 300
gttggcgctg tcaccgctgt tgggcctggc ctactggca ggaagggtgg cgatgttggt 360
gcatatgccg gcaaccccat gggctcctat g 391

<210> 143
<211> 359
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-003-Q1-E1-B9

<400> 143

gaccacacg tcaaccgcnn gctatcagct tctgaaccg tcatcaggac caacgctctc 60
ccttcgaaat gcgaacctgc gccatagcga catctgctgc agtcacgatg tgacgagcag 120
agataccgtg gatgaagact tcagggactt cgaggctgcg tggatgatc atgtatcttg 180
ttcatatc atgttatcga gagtttggtt ttctttctac tgtcggtatt caatcaactg 240
tggcttctgc tggcactctg ttctgttaa gatagcttcc atctcaaac ctacatacaa 300
atttatagac aattgttgta ccttttttta gtattaaatt tatttatata ataaattta 359

<210> 144
<211> 337
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-C1

<400> 144

cacgcgtcga ccaaggctgc ctccaacgtc gtcgccagcg cgcagcccgt ggagggcgac 60
ggcggcggtg gcagcgtcag gcagttcaac ttcacctcag tcatgccgtt cagcttcatg 120
aaggagcgtc tcgagttcct cgacgcggac aagtgcgagt gcaagaacac gctcatcgag 180
ggagggcgga tcggcgtcgc catcgaaacg gcgacgtcgc acatcaaggt ggagcccgcg 240
gccggcgggc ggagcgtggt gaaggctgaa tccacttaca agctgctgcc gggcgtggag 300
gtgaaggacg agatcgccaa ggccaaggag tccgtca 337

<210> 145

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-C12

<400> 145

cgccggccgc cccctaatacc cgccggccct gtgtgtgttc cgcgctacca gccatggcgt 60
cgccgttctc cgtgccttcg ctgatcatgg aggaggaagg gcggttcgag gcggaggtgg 120
cggaggtgga gtcctggtgg ggacacggagc ggttcgggt caccaagcgc ccctacaccg 180
cccgcgacgt ggtcctctc cggggcacgc tccggcagag ctacgcgtcg ggggagatgg 240
ccaagaagct gtggcgcacg ctcaacgcgc gcatgtcgt gccccgcgcc gagcgcacgc 300
gggcgccgta cgtcgagctc ctcaagccca gcatcgccga tcgcgatcac ggctt 355

<210> 146

<211> 93

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-C2

<400> 146

acgcgtcgac agttttctc atgaattgcc tcgagttttc ccagcttctt gagggttaca 60
gcttggtggt cactttccgg ggatgtgtcg tcg 93

<210> 147

<211> 204
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-C9

 <400> 147

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 ttagagaggt cgacgaagta gtgagaacag gattgacgcc tgcggagagg ctgctgaacc 120
 tgtacgagac caagtggtaa cgcaacgtcg accatgtttt cgagcatttg ttatactgat 180
 tactgacgat gacgccgccg aatc 204

<210> 148
 <211> 363
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-D11

 <400> 148

 aaataacaca caacagcatc tcaaaaatct aacacactgc aacaagcaga gcaaagaccc 60
 gggattcgcc ggcgcggtag cgagagcgag agatggacgg gaggatgttc ggtctcgaga 120
 cccccctgat ggtggcgctg cagcaccttc tggacgtgcc cgacggcgac gccggcgcg 180
 gcggcgacaa ggcgagtggg gccgcggcgg gcggcgggcc cacgcgcacc tacgtccg 240
 acgcgcgcgc catggcgggc accccggccg acgtcaagga gctcccgggc gcgtacgcgt 300
 tcgtggtgga catgccgggg ctgggcacgg gcgacatcaa ggtgcaggtg gaggacgagc 360
 ggg 363

<210> 149
 <211> 330
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-D2

 <400> 149

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aacgtgtacg tcgagttccg cagcgtcgag ctcggcgacc gcgccctgta ggagctgctc 180
ggccgcgtct acgcgggggtt acgcatcgac gaccatgtcg cgcccgatgat ggacgtcctg 240
gagggcagct actactcgtg ccaagacctc agctgcgact tctggcgggt ctgcgacttc 300
atggacgtca cgtgcgtccg cttcgacgtg 330

<210> 150
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-D9

<400> 150

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tcctctcgtc gtctcctcca agcacggatc aggaacactg aaattctatc tcaaccggtt 120
ctgccgactg ggtaacttga attcgaaaga tgaggcatgg tttggaagtc ttccaagaag 180
cagtcgtacc catgctgata tgaacagaga tgaattggaa ctttgttgct gcagccttaa 240
gcaagagtgg taatactttt gacacaacaa ggtctatggt actcatatct gaatcagaga 300
aagctaacct aaatgattag gcaaggaggc tcctttctaa gcctatcaag tttttcaatg 360
agatgcaaga attgtttatt ga 382

<210> 151
<211> 351
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E1

<400> 151

tcgcggggccg aaccacgcgt cgaccacagg ctgttccact taggcctgaa gaaatacggc 60
aaggggggact ggaggaacat atcgcgcaac tacgtccaga cgcggaacgcc cacgcagggtg 120
gccagccacg cgcagaagta cttcatcagg ctcaactccg gcggcaagga caagaggagg 180
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<210> 152
<211> 123
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E10

<400> 152

ggccgaccca cgagtcaact tgtcctcaac agccgtagg gcgccacat tgtagaagcc 60
tcctgggtgt gacaagaata cgttccatt ggtttcagtc cgggagggat atcgactaac 120
att 123

<210> 153
<211> 56
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-A1

<400> 153

cacgcgtctg acacgctgcc atgcaaggac gtcctggcct aattagtcac agcacc 56

<210> 154
<211> 415
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-003-Q1-E1-A12

<400> 154

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cgcagccaga cctcgccgcc gccgccgcg cgtcctgccg cctcgcgctc gccctcaagg 120
gcctccccgcc cgtcttccac gaactggagt gggacctcgt catggtcgac gcgcccacgg 180
ggtggacgcc gcaggcgccc ggacggatgg ccgccatcta caccgccggc atggcggcgc 240
gcgcgcgcag gcccggggac ggaccacccg acgtcttcgt gcacgacgtc gatcgaccgc 300
tcgaggacaa cttctccaag gcgttctgt gcgagggata cctcgccgag caagtcggcc 360
ggatcaggca cttcgtcatc ccgtncacc gctagaatga ccgcacacca ttctg 415

<210> 155
 <211> 357
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-A9

 <400> 155

 cgtcagcttt cggtgcgagg agtttgttca actgcaccct tagcgcgatc cattgccggg 60
 gacggtgcaa cttgttgcca gcctcctcta aggcgagcgt cgcaccatgg ttccaccacc 120
 gtccccaacg acgtgccggg cagctactgc ctgccgctgg cgggcgccgt gcgcgaccgc 180
 ctcgacttct actacttcca ggggcatgac acgtacttcg agtcccgcct ggtgcgcttc 240
 cgctccaccg tgggtgcgcat ttccgttccg ccggggccct tcgtggcgcg cgaccgcg 300
 gtggtggcgg tcctgtacgc ctagagcttc cccgtgcgct tcgacatggt caatgtg 357

<210> 156
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB143-003-Q1-E1-B11

 <400> 156

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 gacgtgcaga gggcgctcca cgccaacgtc accgcctcg accaccctg gtccgcctgc 120
 agcgatgtct tgagacgctg gactgacagc gccacgaccg tcctgcctat tctcacggag 180
 ctctcaaca acgacatcag ggtctgggtg tacagtggag acaccgatgg gagagtgccg 240
 gtcacttcca gcaggtactc cgtgaaccag ctccagctcc cagttgccgc aaaatggagg 300
 gcatggttca gcnagcactc aggcgccgga gaagtggcg gctacgtcgt gcagtacaaa 360
 ggcaaggaga aaggcanctt cacctggta 390

<210> 157
 <211> 118
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-B3

<400> 157

acgcgctcgga caattgttta acatgaaaga gcacatttga cagatacatc tcagtatgtg 60
gaccatacag cttatttgtgt agcgaagtac gactgtactg gatgaagtga cgcagggt 118

<210> 158

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-G1

<400> 158

ggacgacatg gagcgagtgc tctccgacat gctcgacagc gtgtcatgca aaccggacgt 60
ttggaccatg aacatcatcc tcagcctctt cgggaaccgg ggcgagggtg aactgatgga 120
gagatggtac gagaagttcc gaggctacgg ggtcgagccg gagaccgcga cgctgaacat 180
cctgattggc gcctacggga agcggcggat gtatgacaag atgtccgcag tcatggagca 240
catgcgcaag ctgcggttcc cgtggacgac cgcgacgtac aacaacgtga tcgaagcatt 300
tgctgaggcc ggcgacgccg ggaacatgga gcacgcgttc aaccagatgc gttccgaggg 360
catgaggccg gacactaaga ccttctgctg cctgatcgac gggttcagca gggc 414

<210> 159

<211> 369

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-002-Q1-E1-G2

<400> 159

tactgtcctc acatatcact aaccaagga gtgcaagaaa cttttcattg ttcacctatc 60
cgaaagagag tattttgctg ttccaaggaa tctgaaactg cttgctgttc cactgtttga 120
actctacgac aatgttcaga ggtacnggcc tgtcatctct accatccgcg agcagctttc 180
taggttccag ttcaacatgg ttagctctta gggatgatgat acaagaaaac caatgtggcc 240
aaagcagctc ttcggttgct gagctagctg atcaacgtac cctgactgat tttatttcat 300
tgtgctggat ttttttatat agactactac tatctagaca tgcatttctg attgtattgt 360
tgttgaatt 369

<210> 160
<211> 197
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-G9

<400> 160

accgtgaaaa ctcaatttta ttgtttatta ttcaaaggga tacatgaata atacccgga 60
aattgtacat acgaaaccaa acaaacatga agtacattat atatacctaaa aaacacagga 120
aacatctcac aacacagcga cagccacgga ccattcagca tcagttaacc tttcttccac 180
gtccaaattg gattggg 197

<210> 161
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-H1

<400> 161

cggcgccgct tccgatcggg ttcgctgtgt tcatgggtgca cctggcgacg atcccgatca 60
ctggcaccgg tatcaaccgg gcgaggagcc tcggcgccgc cgtcgtgtac aacaacagca 120
aagcctggag cgaccaggta ttacacaca ttgtccacga ttgcagcact cactcatttg 180
ttggttgcta atttgctgtt gctgcatgca gtggatcttc tgggtgggccc cgttcacg 240
agcggcgatc gcagcgctat accaccagat cgtcctccgc gccagcgcca gggggtacgg 300
ctccttccgg agcaacgcct aggaccatct cgtcggcggg ctattcagct cttcctcctc 360
cgcagtttaa ggtgaacg 378

<210> 162
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-H4

<400> 162

gcacgcctc ctccggccgg ctccggctcc cctgcctt cgcgcccttg gtccggccaa 60

tccggcccct tcggcggggc caccgccttc gccgggaaac ggccacgttc cgcgggcgca 120
 agggcccaaa ttcggggccg ccgtgcctgc cgtcgagcaa ttccaccgca ggatgtcaac 180
 ccaagccact gtgcatgcct tcaaggatat tctgaccagc ctcgctaagc ctggagggtgg 240
 tgaatatgga aagttctaca gccttcctgc actaaatgat ccaacgattg ataagctgcc 300
 gtactccgtc cgtattcgtc ttgagtcagc tatccgtaac tgtgataact tccaggttac 360
 cacgaatgat gttgagaaaa taattgactg ggaaaacaca tctccaaagc tggtcgacat 420
 ac 422

<210> 163
 <211> 377
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-E2

<400> 163

ggtcgaggcc gcgtccagga cgagcatcga gagcgagccg ccattgccta gaggactcgg 60
 cgagagctct attcgattcg agactcgaga gcatagccgt gcactgggaa gaggacgtct 120
 acgagcagat gagcgggctg gagctggagc tgggcctgag cctatgcgtc ctcacgcagc 180
 tcgtctacga gcagtggatg cgcgacaccc tccccgccga tgacatcccc gtgccgccgg 240
 ccatggcagt caaaactgag gacgccgagg atctatcgcc cgccaatcac gaaagccaac 300
 cagcacaagg ggatgtatgg cgtgattttg ccttggtaaa tctctgattc tttatgctct 360
 acattgtaca agtgcct 377

<210> 164
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-F2

<400> 164

cggtcagat tacgggtcac caccgtcgag gggagtcagc cattgatgaa agtatctgcc 60
 ctggcaattg catagcctgc aatgaccatg ttgcacttac gcaccctgac cttgacaagg 120
 agactgagga gttcattgca gatgtgcttg gggtcgaggt gtttacgcag actattgctg 180

gaaatatacct tgtggggagt tactgagcct tctctaacag ggggtggttg gttcatcccc 240
 atacatccgt tgaagacctt gacgagctct ccacgctcct ccaagttcct cttgtcgcaa 300
 gaactgtgaa cagaggaagc gaggtcattg ctgcaggcat gacagtgaac gactggactg 360
 ccttttgtgg ctcgacacg acagccaccg agctctcagt catcgaaagc gtcttcaagc 420
 tgagagaagg gcagcccact gcgattgtg 449

<210> 165
 <211> 353
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B9

<400> 165

ataaggctat atcaatcatg gcgaaacctg aattccctga gttgatagat tttaatccaa 60
 tccatgcaac tgacgtccaa ctaccttcag gtggtacatt tgtgatcgcc cattgtttgg 120
 ccgagtccaa gaaagcagag acagctgcaa taaattataa taaccgcgtt ttggagtgtc 180
 gcttatcagc gattgttctt gccatcaaac ttgggatgga taggaaaaaa gctatctcct 240
 ccgttacaac cctctccgat gttgaggggc tatgtgtttc ttttgctggg agagaagggt 300
 catctgatcc tgcagtagct gtgaagaaac ttctgcatga ggacccatat aca 353

<210> 166
 <211> 341
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-C1

<400> 166

tggaaagctt caagacgttg aagattggct atatgaagat ggtgaggatg agacacaggg 60
 agtctatatt tctaaactgg aagatcttaa gaagattggt gaccaattg aggcacggta 120
 caaggagtgc acagaaaggg gttcctctgt agatcaactg gtctactgca tcaacagttt 180
 cagagaggct gctttgtcca gtgacaaaaa gtttgccat atcgacatat ctgagaaaca 240
 gaaggatcatc aatgagtgtc ctgaagtaga gaactgggtg agagagagga agcagcagca 300
 ggacgcccta gctaagcaaa ccgatcctgt gctgctcgta t 341

<210> 167
 <211> 310
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-C12

<400> 167

gtcaccctc ctcgtccgtc gctcacaag gcgaccagcg ggcggaccct ccgcggcgca 60
 accatggggc tcttcaactgt gacgaagaag gccaccacgc ccttcgacgg ccagaagccc 120
 ggcacctccg gctccgcaa gaaggttact gtattccagc agccccatta tctgcagaac 180
 tttgtccaat caacattcaa tgcccttctt gtggatcaag taagagggtgc aacaattggt 240
 gtctctgggtg atggccgcta tttctcaaaa gatgctgttc agatcatcac aaaaatggct 300
 gctgccaatg 310

<210> 168
 <211> 327
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-002-Q1-E1-C2

<400> 168

ctgtcaacgg ttgggcgggtc atcaagttcg tcgccgacaa ccaggtgtg tggtcatgc 60
 attgccatct ggacgtgcac atcacctgng gctggcaat ggctttccta gtggaggacg 120
 gctatggcga actgcagtcg ctggagccgc cccagttga tcttcccatg tgctagtgga 180
 ggacggatat ttgtgttgag gaagaaagcc tggtcacgtt gtatgttaat tgttactctt 240
 ttttggtgga ggggggcgtg ttcgtgatct taaattctta ggggacttaa ttttccagct 300
 tgttggtttg aaatttcctc tgtaaat 327

<210> 169
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D2

<400> 169

gcgtcgagga aagcgtatgt gtggataatt acacaaagtg aacttcatgt caccatcaca 60
catacgcttt ccatttcagc ggaggcgatc tagcacgatg cgcattgcct agtacagtac 120
aagcagggag ggtttcttct gaccgaagga ggggaagacc attccagcga gaatcgatgg 180
atatctcagc caaaaaaggt taaaagacga gggggggagg aggaagtga acgaaatggg 240
aaattctgcc gttggcgtag gtgaagatga agggaggaac aaataatctc cttttctcgt 300
gtcgcataat aacagagaca gtgtgttttc cgttttcccg tttgccgtgt ctgcgttctc 360
tgctcctctc ttcactgctg cgggggtccgc gtttcttggg gg 402

<210> 170

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D4

<400> 170

gggtcgacgc ccgcgtccga agcaagcgta catgcgcggc aagaggggtgc tcgagatcaa 60
ccccaggcac cccatcatca aggagctccg cgacaaggtc gcccaggaca acgagagcga 120
ggagctgaag cacacggcga ggctggtgta ccagacggcc ctgatggaga gcgggttcaa 180
cctccccgac cccaacgagt tcgcgtccag catctacaag tcggtgcaga agggcctgga 240
cctgagcccc gacgcgaccg tggaggatga gaacgaggcc gaggagcagc cggaggtgga 300
gaaggagccg gagccggagc cgtcgtccta cgacaaggac gagctttagg ctttcggatt 360
tgttttcaag tctagctagc tcccgttta ctaggaatgt gaatcagtta cggcct 416

<210> 171

<211> 464

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-A1

<400> 171

ggaaccggcc gagaatcccg gggccaacca agcctccgag gaacggcaac aactccggaa 60
ggaaggctcc aacggtccaa caactccaac ccggtccaac ttgctccggt aacaaaacca 120

acccgggcca acgccgaagc aacccccctt cgtcctcgc cagatccggc gccgcctccg 180
 ccctcactta cactagcacg cacggcggac acgtcgctc ccccgcgca tctgatgcag 240
 gcgcacgcgg tggccaacgg cgatgcggtg gaagcttaac tcctccgtct acaagcgcgt 300
 gccgtccagg gaaaccgcca tggaaccgca cgtcgagacg ccaatgagaa tgacggacgg 360
 cggcggcagc ggcgcggggc cgtcctggcg catgtcgttg ccgcatgtct gtgtcgccac 420
 gtcacctcg ttcctccttg gataccaccc cggggtggtg aacg 464

<210> 172

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-A2

<400> 172

ccgcagcgaa cgagaaagca gaccaaccta gccaccagg gagaaaggcc aaaagggagg 60
 ggagagtgtc gtcattgggtt ccattgtcgc ttccaggatg gccgttcctc tagttcgcg 120
 tctggagaag ctcatcgcaa cgtcctccgc gcccgggact ggctccgccc tcaggccggt 180
 tgcagtgcgc ggcggcctcc gtggctacaa caccggcgct ccgctccgac gctacgatgg 240
 ggccgagtcc gaagacgata gcgtccgca gtacgatggg cggcacggcg gccgggacta 300
 cgccgtgccc agcctgttct cagatatattt ccgtgatccg cttagtgcgc cgacagcat 360
 tggccgcctg gtgaaac 377

<210> 173

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-A3

<400> 173

cccaatttc gtccctttca caccggagaa cgggcgagca gagccgcgca aagcagaacg 60
 cggaagcaag aggaggcgat cgactactcg accagccctc tccgctcttg tctccgatgg 120
 cggctcgcgt cctcgcgggc ctcgcccttg ccctcgccct cgccctcgtc gccgtacccg 180
 ctcccacgcg ggcgtccaac gacgaggggg acgcgctcta cgcgctgcgg cagcggctgt 240

cggaccccaa cggcgtgctg cagagctggg atcccacgt cgtcaccccc tgcacctggt 300
tccacatctc ctgcgaccag gtcggccgcg tcgtccgcct ggacttgggc aactcc 356

<210> 174
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B1

<400> 174

attaattatt gaggacacag gtgtcggaat acaactgcaa gcacaaaatc gggtttttac 60
accgtttatg caggctgaca gttcaacttc aaggaattat ggcggtactg gcatcggttt 120
aagcatcagc aagtgtctag ctgaacttat ggggtgggcag ataagtttca ccagccatcc 180
ttctgttgga agcacgttca ctttctcagc cactgaag cactcatata aagatatttc 240
gggtgattca agtaggagct tgacagaggc actaccaact gcttttaagg gaatgaacgc 300
catcttggtg gatgggagac ctgtacgtag tgctgttaca agatatcacc tcaagagggt 360
gggaatactt cttcaagttg tgaacaatat ga 392

<210> 175
<211> 346
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B11

<400> 175

ggacatgccg cggaccaggg aagggttcta ccgcttcagg ggggccgtgg cggcggccgt 60
gggccggggc cgcgccttcg cgccgcacgc cgacgtgctg tggatggaga ggtccagccc 120
caacgtggcc gactgcaccg ctttcgccga gggcgtcaag gcggcgtgcc ccgaggcgat 180
gctcgcttac aacctctcgc cgtccttcaa ctgggacgcg tctgggatga cggacgccga 240
gatggccgcc ttcattccga gcgtcgcgcg cctcggctac gtctggcagt tcatcacgct 300
cgccgggttc cagcccgacg cgctcgtcac cgacacgttc gcgcgg 346

<210> 176
<211> 341
<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-G6

<400> 176

acggtctaga atccgggtca acagcgtcag caccgtcgca catctagcag caaccttcga 60

cgtcgtgggg aaatggacgc cccccgccg ccgagaaagg ggtcaccag aaaccggttg 120

tgcggttacc ctccccgggg aatggccac cggtcctcaa taatacagct gggcaagatg 180

ggcagatcgc gacgactgtc cgtaatcatt gtcatggtcc agcctccctt caacacgggc 240

gctaccgcgc catacctcgc cggcgtctcc gcagccaacc cgttccatct ccttccatca 300

cctgccc aaa gtcgagcgcc tcccgcccg caagaccaag c 341

<210> 177

<211> 351

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-001-Q1-E1-G8

<400> 177

gaccacgcgt ccgagaatgc caccagcatg catttacagg ctttgaggag attgacgggt 60

ccanattcta canggccaca ccatccaact tggcaatggg tcagttacaa ccggcttact 120

ggccgggacc ggtccaaaga agattaagat aacctggcaa tcaatccttc cgctcacaga 180

ggaaaggaga tatgaggcat gacctttgat atacaagaga aagaaagagg aagagaggat 240

ttgtttcttg acaagctaag catgacgcct ccaggccaac tagacaagcg tgagagaaga 300

agtttttagta tgacgcggaa ggcagcaaaa ctggatctga acatcaatga t 351

<210> 178

<211> 259

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-H12

<400> 178

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atcctagtat cgtagaaacc acctgcattt tcatttggat ctccctaata cctccggcta 120

gctgctttcc agtgagcaag ggatatcaaa ggacacttcc cgtcttcctc cegtggctgt 180
 ctgtcatctg gctctgaaac gatggcagtc ctgcaaatta ctgctgctgc ctctccccct 240
 gtctctgtga gtgggttcg 259

<210> 179

<211> 162

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-A11

<400> 179

ttcagaccgc accacgttca ctacggcgtc acgtggcagc gctacgggtca tagtctatac 60
 gcaacgctag ctcaagtcgg ggcgcgggggt cgctgtttcc gtgtactata tgctctcggc 120
 acctcggtac agtagtgctt gctacgggtg gcttgtcccc ac 162

<210> 180

<211> 315

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-A3

<400> 180

actcgcggat cgatccacgc ctctaccag tcgtacacgc taggtcgcaa actcaacaca 60
 cagtcagcct caaacctctt tctcgtccga atccagaact tccatccatg gcagtgtcat 120
 cagggatggg cttctccgtc cgcgcgcggg ctccggcccc gccctgcgct tgctctgcca 180
 cggcgagggc gcgccccgtc ggcgacggcg ccaagtgggt ggcgccgctg ctgggggtgg 240
 ccgggcagcc ggactacatc gatgcgcggc cggcgtccga ggacgagcct ctgccgcggg 300
 ggccggcctc ggcct 315

<210> 181

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B5

<400> 181

ccacgcgtcc acggacgcgt gggcggacgc gtgggcaagg caccacacct cttcttcttc 60
 ttcttctcc tcttagcaca gctagcgctt gctcccttc gcctgtgatc atgtcttgca 120
 gcaacggcaa gtgcgactgt ggctccagct gctcctgcgg cagctcatgc aactgcatgt 180
 cccctaacgt ggagaccgcc gccgccagca acatcaagac cacggtcctc gccgcgccga 240
 ccaacaaggg caacgccggg cggttccaag ccgccaccga aggcggcggc tgcgac 296

<210> 182
 <211> 103
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B6

<400> 182

ccacgcgtcc gaaaaactac agtacgcata tgatgcgtac gtacgtgtgt atagtttgtg 60
 ctcaataaaa aaaaaaaga aaaaaaaca cgaaagagag aac 103

<210> 183
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B7

<400> 183

ccacgcgtcc ggccgctgat ccaattaaac ctatggaggc tgccgcgttc agcaacacaa 60
 aggacaccgc ttctccaccg gagaagaaac cttccaacc aactccatca aagaagaaga 120
 acagaaaagg cggcctgtcg ctgttctga gcggcgctct cgacgacacc ccaaaaccaa 180
 gcctccctgc ccccgctgtg cctgccacac cgaagcccga aggaccgcc tggggcggcg 240
 tgaagataac caagggaccc gcttcgcttc gagacatcca gaccgagcag agcagaacaa 300
 acgagcccgc gtcggccaag gcgaaggacc gccacgagaa ctcgccggac agcggcgcc 360
 gcgcgacaag gctctctcg ttcattcccc acgcgcgttc cagccaata g 411

<210> 184
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-B8

<400> 184

ccacgcgtcc acggcgtgcc cgggcccgcg gtggcggat ccccggcgca gaggctggcc 60
ccgaccacgc tgacgccgtc cagcgcgccg cccacgccg ggggcgcgat gccatgccc 120
aggaagcggg tccgcaccaa gtccaccgcc gagcagaagc agcggatgca ggagctgtcg 180
gagcggctcg ggtggcggct gcagaagcgc gacgaggcca tcgtcgacga gtggtgccgc 240
gacatcggcg tcggcaaggg cgtcttcaag gtctggatgc acaacaaca gcacaacttc 300
ctgggcgggc acagcgcgcg ccgcagcgcc tcctcgcgcg ccccgcccc cgcgcgcgcg 360
tcgtccaaa cccaaccgc cggcgccggg gctgctgcag caccgtcatt caaccgtcg 420
ag 422

<210> 185

<211> 329

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-C10

<400> 185

cacgcgtcca aaagcaaca tgcagcagca caagcaagaa ccacacctcc tcgcttcgcc 60
tgtgatcatg tcgtcatgct ggggcggcaa gtgcgggtgc ggctccagct gtcctgcgg 120
cagcggatgc aacggctgcg gtatgtaccc tgacgtggag accgccgcca ccagcagcgt 180
caagaccacg gtcctcgccg cgcgcaccac caaggccagc gccggcggct tcgacgcggc 240
caccgacggc ggcggctgcg actgcaacac ctgcaagtgc ggcaccagct gccgctgctc 300
ctgctgcagc tgcaactgaa ctggcccg 329

<210> 186

<211> 438

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-002-Q1-E1-C4

<400> 186

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 tggatgatgtg gggctcgggt cgggtcttcg tcgcgttgct ttcttccttt cctcnccttc 120
 ccctcccacg tacgccggtc gccggcacgc gctcgtgacg cgcaagtcgc aggtcgcagc 180
 aaccgtaacg cgccgcgagc ccgcatggcg gcctgactcg gcgccacgcg tttgctcctc 240
 cggccaccat cctggctcct tccttgtcgc cgtttcctcg gctatatagc cgccagcctg 300
 gcggaaggag aacggccaaa ccagcaccgc ccgcccacag gaacatcgcc gccagatcg 360
 gctgcatacc tgttcttctt ctgggcgcgc gagttcgcat cgtcggctcg tcgttcggta 420
 acttggggga gcaatggg 438

<210> 187
 <211> 134
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-002-Q1-E1-C5
 <400> 187

ccacacgtcc acccacgcgt ccggccaagt gtgcgtgtgg taccgttgcg atagaataat 60
 cagcatgggt agtggtgtcg ggtcctttcc ctgaaactga aagaaagcag cggcgtgcct 120
 gtcgccttcc ggct 134

<210> 188
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-002-Q1-E1-C6
 <400> 188

ccacgcgtcc agaccgtagc agcgttggtta ccacacagat ccaaccattg ggggtctttc 60
 atcatgctga accagaacat cagaaatttg aactgaagcg taaaccgttc ctcttgcaat 120
 tgattgggaa tttgccggag gaggagctcc tgacatcaac actagctgca aaactgaatg 180
 catatgccgc tgagctctgc cctgtgaata cccaaaagag aattaactcc aagattgatg 240
 aggtcacaaa gaaaggatgg cccattttta gggacattta actctttcta gcttttggac 300
 tgaaaccgat cgatgcaatg tagacacaga agaggtgcat gattttgcat agaagatttt 360

taggaatatt tcagctgttc gccactgcca tgatgacctc aagcatccag tcgtcagt 418

<210> 189
<211> 435
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-002-Q1-E1-C7

<400> 189

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tgatttcaag atgatctcaa gggcacttac cagaaaagga actgctcttg ccaaacttgc 120
taaatacatcg caagactatg atgctgccat tgagattttc cagaaggcgt taactgagca 180
ccggaaccca gatacactga aaaaactaaa tgatgcagaa cgagcaaaga aggagctgga 240
gcaacaagag tactatgacc caagaattgc tgacgaggag cgagaaaaag gtaatgagtt 300
ctttaagcag cagaaatata cagaagcagt gaaacattac accgaagctc tcaggagaaa 360
ccccaaggac cccaggggat acagcaatag ggctgcctgt tacaccaagc tangggccct 420
tcctgaaggt ctgaa 435

<210> 190
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-C8

<400> 190

ccacgcgtcc acggacgcgt ggggactctt ccattccatt ctattcccgc ttccacacgt 60
cggtcggcgc ccttcgcgat cgtgtcgttt cttcccgcag cctgcctgcg tgtgggggtga 120
tggttaggca cttcaagtac gtcacacctg gcggcgggtgt cgcggcgggg tacgcggcga 180
gggagttcgc caagcagggc gtcaaccccg gcgagctcgc catcatctcc aaggaaccag 240
tgccccctta tgagcgcctt gcaactcagca agggatacct cttccctcag aacgctgcaa 300
gactgccagg cttccacacg tgtgtgggca gcggtggaga gagactactt cctgaatggt 360
actctgagaa aggcattgaa ctgacacctg gtactgagat tgtgaaggcc gaccttgctt 420
caaagactct gaccag 436

<210> 191
 <211> 374
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D11

<400> 191

ctgcagtgcg gtccagaatt tacgggtcga cgcccgcgtc cgagcacagg tacggccacc 60
 accaccggcc aggaagcaag ctcaaaccct aaccgccggc gacgccagca cgatggcccg 120
 ctacgaccgc gcgatcaccg tcttctcccc cgacggccac ctcttccagg tcgagtacgc 180
 cctggaggcc gtccgcaagg gcaacgccgc cgtcggcgtc cgcggcacgg acaccgtcgt 240
 cctcgggtgtg gagaagaagt caacccccaa gtcctcaggac tccagggtccg tgcgcaagat 300
 cgcggtgcctg gacacccaca tcgctctggc atgcgcgggg ctgaacgcgg acgcacgcgt 360
 gctcatcaac cgcg 374

<210> 192
 <211> 305
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D12

<400> 192

ccggtcaaga attaacgggt cgaccacgc gtccattttt gtccctttta taaaaaaaaac 60
 tgttgatata cattatttcg ttagttacac ttaacgggtg taagtgggtg tttgtcactg 120
 ctctaggttt caacttgagt gtgaagatga tgtgtttgca atacttccat cgttaatatg 180
 gtatgcttat aataccctta taaacttttg taaacactac cacctccaag cgagaagaca 240
 tatccactta taaaaaaaaa aaaaaaaaaaag aacaagaaaa aaaaaagagc ggccgctcta 300
 gagga 305

<210> 193
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D3

<400> 193

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 tggctcccgc cgccgtcgca ctcggtggcg ccgcaggggt acatgcccgg ccggctctac 120
 gacctggacg cgtccaagta cggcaccac gcgagcgca agtcgctcac cgcgcggttc 180
 cagccaagg gcgtccagtg cgtcgccgac gtcgtgatca accaccgctg cgccgactac 240
 aaggacggcc gcggcatcta ctgctcttc gagggcgga cggccgacag ccgcctccac 300
 tggggccccg acatgatctg cagcgacgac acgcagtact ccaacgggcg cgggcaccgc 360
 gacacggggg gccgacttcg ccgccgcgcc cgacatcgac cacctcaacc cgcgcggtgca 420
 gcaggagctc gcggactg 438

<210> 194

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D5

<400> 194

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 aagaggagga agaagaagca tcggcagcat gtcggagggg actgccaaact gcgtggacat 120
 cctgatcgcc atcatcctgc ctccgctggg ggtgttcctc aagtacgggt gcggccacga 180
 gttctggatc tgctcctcc tcaccttctt cggctacatc cccggcatca tctacgccat 240
 ctacgccatc accaagaaca actagctagt catccttgcc gacgacgatc catgtctctg 300
 tatctgcgtc tggtcatatg cctgatgccg acttgtgctg tatgtagttg cttgacttca 360
 gtcgtgtttt ggctacgtac ccacccaag cca 393

<210> 195

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D6

<400> 195

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agattgccga ttttggctta agtaatatta tgcgtgatgg tcactttctt aagacgagtt 120
 gtggtagccc gaattatgca gcacctgagg tcatatctgg taaactatat gctggtcctg 180
 aagttgacgt ctggagctgt ggagttattc tttatgctct tctttgtggc actctcccat 240
 ttgacgatga gaattattcca aaccttttca agaaaataaa ggggtggaata tatacccttc 300
 ctagtcattt gtcaccttca gcgagggact tgattcccaa aatgctgggtt gttgatccaa 360
 tgaaaaggat tacaatacgt gaaatccgt 389

<210> 196

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D7

<400> 196

ccacgcgtcc agttttgtga ggagaggaat ttcatatgtg tgaagagaag caaggcacgt 60
 ggcgcttgct aggtgtcaaa tagaaagacc gaacccaaac catcgccgtg ttcattggaca 120
 ccgcgtcgag tttagtcgtg gtacgctaga tgattgtgcg agctgaagga catggatcag 180
 aatcttgtgg atgcatcaag ccagcaccag aatggaagat gtcaccaag tggtcgtcaa 240
 ttaacaacac taacatagtg tttatcccag gattataagt ttgttctgtt gtggatgggtg 300
 ctaagtgtcg gtgggctcag ccttcttata taagtatatc acatctttag cttctttatt 360
 gaggactgtc acttaagcta gcatgtattt taaaacttat aaatgtttta tacattcaaa 420

<210> 197

<211> 461

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D8

<400> 197

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 ttcttcgagg cgaggagagc gtgaaagaca gggcaccggc agcgacgatg tcggggcgcg 120
 gcaagggcgg caaaggtctg ggcaagggcg gagcaaagcg ccaccgtaag gtgctccgtg 180
 acaacatcca gggcatcacc aagcccgcga tccgtaggct ggctcggagg ggcggcgtga 240

agcgcatttc ggggcttata tacgaggaga cccgcggcgt cctcaagatc ttcctcgaga 300
acgtcatccg cgacgccgtc acctacaccg agcàcgcacg ccgcaagact gttaccgcca 360
tggaçgtcgt ctacgcgctc aagcgccagg gccgaaccct ctacggcttc ggaggctaag 420
ctggatgcct cttcccccttg ctgtcctgga tgcccgtttg t 461

<210> 198
<211> 358
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-D9

<400> 198

acgcgtccga ggcgaatggc tcatecttgc ttaattacca aggtaccttt gcagctgcag 60
gtacgtacgt agctagccgc catagcaagc tatgccgaag cagaggagtg atggccaagg 120
tccaccccaa cgccgcggag tccgtcgtcg cccagcagt agcaccagta ggctccgccc 180
aggcaaacgc cgaggagag ctgccacgg tgctgaccgt gtggcgcaag tcgctgctct 240
tcaactgcga cagggtcaac ctctacgaca cgcgggcgca catggccctc cgçgtgtgag 300
aggaaacgcg ggccattccc gcccgçggct ccccgccaac gtcgtgctca tggacccc 358

<210> 199
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-E1

<400> 199

gggtcgacgc acgcgtccga cgcaacgtcc ccgtccttt gccggcgctg cgcccaggcg 60
cgggccctcc cagcaagtcg cctccctccg cctaccgcg tcgccgtgca gcccccgcc 120
gcgccggtcg cgacgcgcat cggctccttt gacaaggctg tggaggcgct gatcggcggg 180
accgacttct ccgaggagga tgcggaggcg acgctgaagc tgctgctgga cgagaaggac 240
caggcgcgca tctccgcctt cctcgtcctc ctçagggcca agggcgagac cttcgaagag 300
atcgtggggc ttgcgaaggc gatgttgagc tgctgcatcc gagtcgatgg tccggatgac 360
gccgtcgaca ttgtcgggga caggcgçgca cggggcagac accgtcaaca tctccaccgg 420

gtcc

424

<210> 200
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-E11

<400> 200

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cgctgcggg gctggccgcg gccagcagct agccggcgctc gtccggctcg gcgcggcgcg 120
gcgtgcagcc agcggggctg tccctgtcct ccggggcaag caaactgccg ggccccgtgc 180
gggccctcct ctccgggttc gagggccccg ccaaccggcc ggcgaggaggc aaggaaagga 240
agggcccgtt aaggctgtcc ttggccctcc ccgcggacgc ggtggcctcc gagggccgcg 300
gggtgagccg ctccagggcc gtctcggggg cgctgcgcgc gctcaagctg ctccggctcg 360
acggcgtgga gctgccggtg tcttggggcc ccgtgcaacc cgggttcggg ggctgtttc 420
aa 422

<210> 201
<211> 379
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-E4

<400> 201

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gcgactggcc cagcagcctt ctccaaccga cgcacccgc acccatgctg cgctgccaca 120
cgccaccgca atgcgcccgc gcgcccgtcc gccatcacgg aatgtgggag tcgcctccgg 180
ctgcggcacc cgcggtggtg gtgcgggtgc cgcggggtgc gccgcagggtg tccgggatcg 240
acgcagcttc gccggggcac gccgctgtca cggccgcgtt agctaacgcg gaaggggggtg 300
acgcgcggcc cagcctggcc gagcggctgc ggttggggaa cctcctggag gaacggctat 360
cgtaccacga gagtttcat 379

<210> 202
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-002-Q1-E1-E5

 <400> 202

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 tcattaaggg agattccagc atcaagttaa gaatttgaac aaaaaaatgt ccatgctttt 120
 aagttttttg ttggcactta tgactagtgc agttttttcc ttatgcttgt actccttttg 180
 gatcatgttt ttaacttttt atttgatgaa atgctctttt aagatcatgt tcccttcaac 240
 gctacttggg actggggaaa agtggacaat gatgaagaca ataagtgtta ctgaatatTT 300
 aaattatgaa gcaggaaaat tttcgaagag taaaggtatt ggagtctttg gtaatgatgc 360
 agaggataca aataatcct 379

<210> 203
 <211> 366
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-002-Q1-E1-E6

 <400> 203

 ccacgcgtcc ggccacggcc accacagga gcagtcgagc accctatagc aaccatatgc 60
 cctccgcgcc gtgctctggc ctttcccccg acaccgccag aatccccgaga cctgccggcg 120
 ccgccaacaa gaaaatggcg tgcctctgct cgccgacgag ccacccgggg tcgttccgct 180
 gcagtcggca ccgaaccgag ccggacggcg ccgaggcggt gcccggcgcc accagggcgc 240
 ggtccgtgag cgcgctgctg ctccagagga tcggcgccat ccggcgcgag cccggccgcc 300
 accaccgcgc ccgcggtgtc ggagtcgggg acttccagcc gcgcccctcc aggtctgcgc 360
 tcatga 366

<210> 204
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-002-Q1-E1-E7

<400> 204

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acacctatga atacaggcac gtcgtcctcc cgcccagagt cgccaagctc ctccccagga 120
acatccttct ctccgagaag cagtggcggt tgggtgggtgt gcagcagagc cgcggtggg 180
tgactacgc gatgcaccgg ccggagccgc acatcatgct gttccgccgc ccgatcaact 240
agcagcagca gcaggaggaa gcggtgccc cgcatgtgct gcccaagtga agcctctgct 300
ggcgaccacg aatgttaaca acccctagcc ctcttttcat ctctagaagg ggcgtcgctg 360
ttgtgttgat taatccctct ggctgttggt tgggaacttg ggat 404

<210> 205

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-F1

<400> 205

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cagcttaagt gtgcagcacc cagaagaaaa caagcaggtt gctccagctg agctatgccc 120
aatcctgaag aggctttaca gaatactgat aaaaaggag ctcccagcaa gggacattct 180
tcaagccctg agggacgaaa cgatgaatga tcctcgggaa aggattgaga tggcaciaaag 240
ccatgcattc taccgcccgt ctctccttgg aaaaccatga tctagttagt cttgtagatt 300
agtagaatat aaacggacgc tgtgctgcaa gtttctccac tgtgcttgct gtccttgtgt 360
ccgagctaca tggggatggg gctttgtcag ttgtccaatt ctttgtgctt cctcattgcc 420
atggt 425

<210> 206

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-F10

<400> 206

ccacgcgtcc gagcccgtgc aatccgatcc cgatggcggc ccggccggac gcgcgcagcg 60

gctactgcgc cgcgacgegc accttccgta gcaagcgcgc ggacgtcccg ctccccgccg 120
acgcggacct ggacgtcgte aggttccctcg cgtccccgccg ccacgcgggc gttgtcgcgc 180
tcgtcgacgc tgccacgggc caccgggtca cgttccagga actctggcgc gcggtggaag 240
gggcggccac cgcgctcgcc gcgcgcgcgc tgctcgctccg caagggccag gtcgcgctca 300
tcctctcccc gaactccgtc cacttccccg tcgccgcctt cgcagcca 348

<210> 207
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-F12

<400> 207

ccacgcgtcc ggtggcaatg ggaggtacga tcatttaacg aggcgggtga aatgatatcg 60
gcatcaaggt gtacgggatg gactggactg gtcatggtgg aagtgatggg ctacatggat 120
atgtgcaatc tcttgaccac gctgtcaatg acttgaaaat gtacctcaag aaagtatcag 180
ccgagaaccc tgggtcttcca tgcttctgct tcggccattc gacgggtggg ggtatcattc 240
tgaaggctgc acttgatcca gacgtagaaa cgctcatcag cgggtgtgtc ctgacatcac 300
cagctgtccg tggtcagcct gccaccccaa tcatagcggc catggcaccg atttttgccc 360

<210> 208
<211> 440
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-002-Q1-E1-F4

<400> 208

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aatccaccgc gccgcgagcg atgtcggcga gcagcaccac cgtagacgcc tcggggggagc 120
cgatccccgac ttcgtcgggtg ctgatggcgg cgtcgaagca catcgcggtc cggtgccgcc 180
cggagaacgt tgccttctc aactgcaaga agaaggaccc taaccccgag aagtgcctcg 240
agaagggccg ccaggtcaca cgctgcgtcc tcagcctgtt gaaagaactt caccaaaagt 300

gtcccaagga aatggatgaa tatgctggtt gcatgtatta ctacaccaac gaattcgact 360
tctgccgtaa ggagcagcan gcttttgacg aagcctgccc catttctgag tagatcttga 420
gagttttacg tgcagtggtc 440

<210> 209
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-F5

<400> 209

ccacgcgtcc gagctgattg ttggtggatc aacttttggga aatgtagcta ttgcagatca 60
aacctcaggg cagaagttag gtgttctaaa atcagatcat ggaccattgg caataagatc 120
cttatcttcc tgcacaaatt cacacatgat atttgctggt tcgtcagctg gttatgcaca 180
ttgctgggac ttaaggactt tgaggcctct ctgggaaaaa agagtcagcc caaatgtcat 240
ctacagcaca cgtcatttgc ccggtgacac ggcaacgctg gcagttggag gcattgacgg 300
cgtgctccgc gttatatgcc aaaggactgg tgacatcatt cgcagtcttg tcgttgacgc 360
agatctccca gcagaagcca catctagatt ccggcagcaa atagagaaca aacgtg 416

<210> 210
<211> 90
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-F6

<400> 210

ccacgcgtcc gaataaaaac aaaaaaaaaa aaaaaaaaag aaaatgaaaa aatgcaataa 60
aaagaaaaaa aaaaagttac acgtacgcac 90

<210> 211
<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-002-Q1-E1-F7

<400> 211

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gactgcaacg ccaagaaccc cacctggggc tccgtcacct acggcatctt cctctgcctc 120
gactgctccg ccgcccaccg cagcctcggg gtccacatca ccttcgtcag gtcaacgaac 180
ctcgactcat ggactccaga ccagctgaag atgatggcat tcggaggcaa caaccgggca 240
catgctttct tcaagcagca tggatggacc gatggcgga aggtcgaggc aaaatacaca 300
tcaagagccg ctgaacttta caggcagatg cttaccaagg aggtcgctaa gagcgccacg 360
accgataatg ccctgccatc gtcacctgtc gcatctgagg cttcnaagcc gccatccgat 420
gacttccctg aattcaaa 438

<210> 212
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-F8

<400> 212

ccacgcgtcc gcggacgcgt ggggttcgga aactgatgg aatattcagc ttatgttggc 60
tgtttctccc agacggacaa gatctcacat agtcataaag ctaccagaaa atacagagaa 120
tacttggaaac atatttttga atatctgaca tcatttctgt atcgcacaga gccattgcaa 180
gacattgata agattttttt aaagctggag agtgaattcg aggaacaatg ggccaatgaa 240
ggaatacttg gatgggggaa taaagggaca gaaaaagagt ctgaaataga tctcgattac 300
tacagcacag ttgaagaact tggtgagctt ggcccagaaa aattaaaaca ggcttttagct 360
gctcgagggt tgaagagtgg cgggtactgt caacagcgtg cagatcgtct tttcttggtg 420
aaggttaca 429

<210> 213
<211> 309
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-G10

<400> 213

ccacgcgtcc gggactatct cagcgatttc cgaaccctcc ccacccccac acccaccgga 60

tccaaccgag tcccggcggc gatggcggcg gcgacgaacg ccgatttgga ggtggccgac 120
 ttcaacctca atgacaacaa cttcagggac aaggaccccc gccaaagttca acaacggccc 180
 ccggcttccg gcttcgggttc aacaaccgcg ggcaacaacc ccccccttag gaccaaggcc 240
 cgcggtttcc gcaaggacct taatctcttc ggctaccgga gactcgcgct ttggcgcggg 300
 ggagacgcc 309

<210> 214
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-G12

<400> 214

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 gcgatcgggg ctcaacagca gcctgccact gccgccactg gctttctgag tagccggagc 120
 caaacacaaa ggagggtagg aatagctgtg gtgactcgga agagaaagag acagtcgacg 180
 ccttgttttg ttgatgctta gtgtggtgac ctggtggtgg tgggtggtggg tgttcttggc 240
 acaagttaca tgctggggat agctatagga ggtacctgtt gaggtgtgta agacagtagc 300
 tagcaaccgt atgccttggg ttctgtttg ggtgcgtgac ttgccgactt tctagctgct 360
 tccggggggt tgaactccgg taagggaagg attaaaagga taatcggagt gcaatgcttg 420
 c 421

<210> 215
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-G4

<400> 215

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 actatagcag acaagggtgga ctatggttac aagttctttg agaaggaggt ccctgttgat 120
 gctgtgttcc agaaggacga gatgatcgac atcatcgag ttaccaaggg caagggttat 180
 gaaggcgtgg tcaactcgctg ggggtgttacc cggcttcccc gcaagacca caggggcctc 240

cgcaagggttg cctgtatcgg tgcattggcat cctgctaagg tgcgtacac tgttgctcgt 300
gctggtcaga acggatacca tcaccgcact gagatgaaca acaacgttta caagattggc 360
aaagccggac aggaaagcca tgacgcctca actgagtttg acagac 406

<210> 216
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-G5

<400> 216

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gcgaccacca gttcatagtc ggcgccacca acccgggcct caggggccag agcctcgcg 120
ccgtgctgtc ggccggcatg tcggcgggca agagcggcag ggagctccag gccatcgagg 180
acgagtggct ggccgcggcg cggctcaaga ctttctccga gtgcgtcagg gacgccatcg 240
cgggcctcgg cgtcgcgggc caggagaagc agcgcaggct ccaggagtgg gaccgcgcca 300
ccggcggcta cgacagggtc gtgtccaacg accaggcgcg cgacatcgcc gccagcctcg 360
gcgtcacgtc cgtgttctgg gactgggacc tgccgcggac caaggaaggg ttctacggct 420
tcagggggtc cgt 433

<210> 217
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-G6

<400> 217

ccacgcgtcc agactgcctt gagaatagcg attgggctac tagaaaagca gctgctgata 60
cattatgtgt ctttgctaca cattctggtc acttgatagg tgacggaata gctccaacca 120
tttctgctct tgaagcttgc cgttttgata aggtaaggcc tgcagagat agcatgattg 180
atgcagtaca gttgtggaaa aaactgactg gagaagatgc aactgacggt agaaataagg 240
atctagggtga tgggtgaaggg aaactggact caagacggtc aatgcaaagt ggtggaaaat 300
cagaatgctt tgatgattgc tctccagatt cacctagtaa catgaaggga agtagcatag 360

ctgaaaaggc agcagttctt ttgaagaaaa gaccagcatt aactgacagg gaactgaacc 420
ctgagttctt caaaaagc 438

<210> 218
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<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-H10

<400> 218

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gctgctggta aattcaaaga ggaaattgtg ccagttcata caaagattgt tgatccaaaa 120
actggtgagg aaaagaagat cgtagtctct gcagatgatg gaatccgagt ggatacttct 180
cttgagtcct tgtcaaaact caaaccagca ttttcaaagg atggcagcac tactgctggg 240
aatgcaagcc aagtgagtga tgggtgctggg gccgtcttgc taatgagacg ggatgttgct 300
atgaagaagg gtcttccagt tcttgggtgc tttaggacct ttgccgctgt tggagttgat 360
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<210> 219
<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-H2

<400> 219

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caagcacgct caagcgctgc gcaacggatt ggccctgcta acgttcgccc cgggcaaggg 120
caaggcccca acgccaacg caaggtaagt tagccaattg ggcaactggc ggctttctcc 180
ccaagaaaaa caacaagcaa aaacttcggc aacctcaac ctcgaatcgt tccccaccat 240
ggcgtcgag ggatcctccg tcttcgccgc actcgagcag gccccggagg accccatcct 300
cggagtgacc gttgcctaca acaaggatcc cagccccgtg aagggtcaacc tcggggtcgg 360
cgcctaccgg accgaggaag ggaagcccct agtgctgaac gtggtcaggc gcgccgagca 420
aatgttgatc aataatccgt cacg 444

<210> 220
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-H5

<400> 220

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 ttgcttgctt gctgcttacc tctcagttcc ccactcacgt cccttgccgt acgtacgtgc 180
 gtccaacaca ccaggtgaaa atgggctcgg agacggagac ggtcaacgtg gaaggcatcc 240
 cgttcccggc ggagatcacc gtcggcaacc ctctctccct cctaggcaca ggtatcacgg 300
 acatcgagat ccacttcttg cagatcaagt acaacgccat cggagtctac ctccacaacg 360
 ccggcggcgg cgacagcacc acgcccacgc tgctgggcc 399

<210> 221
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-002-Q1-E1-H6

<400> 221

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 agtttcgctc tcgccggcgt cgacggccta gggttcgagg aacgtccgtc cgtccgtccg 120
 ggggaaggagc ggtagggagg cggagatgat cgaggtggtg ctcaacgacc gcctggggaa 180
 gaaggtgcgg gtcaagtgca acgaggacga caccatcggc gacctcaaga agctggtggc 240
 ggcgcagacg gggacgcgcc ccgagaagat ccgcatccag aagtgggtaca acatctacaa 300
 ggaccacatc accctcaagg actacgaggt ccacgacggc atgggcctcg agctctacta 360
 caactgagcc gccgcccctc tctccctctc gtcaggttgg tctgaattct gaagtcatgg 420
 gtgc 424

<210> 222
 <211> 391

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-002-Q1-E1-H7
 <400> 222
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 acatcttgaa agcctttgcc atgtcaggtg cgctcgcacg gcaggcatca taataaagat 180
 gttgggtttt tgtgctgggt gggagatcgc acagggaatt gtttttttat ccctgggttc 240
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 atcacgggtg ctgcttcaaa ttgaacggat cttctcgtct cgcggcgtgc tgcaaatga 360
 acggggctac atcgcaacgc agcacaggac g 391

<210> 223
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-003-Q1-E1-A10
 <400> 223
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 cacgctatgg tctcacagcc gtatacgtg ctgcggatc ccgctatttc tccaacgctg 120
 ctgcaccgcc agccgttcgc ctcatcatgg cagcgtcgtc gacggcctgc tcggtcgacg 180
 acgtcagcgt caaggatgcg agctgcacaa acgttgacct caccacctat tccgggaacg 240
 ttcttctcat tgctaattgc gcatcgact gtggcgatc taactcgatg ctacactgag 300
 ctggcccagc tctactagaa gtacacggac cacggctttt agatcctgtc tttcccatgc 360
 aactagtttg gtgcgcagga gcctgctacg aatgaagaga ttgtccattt tg 412

<210> 224
 <211> 327
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-003-Q1-E1-A2
 <400> 224

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 tgatttcctt aatccaagtg attcggataa tcgcaaaatc aacagtttgc tctgcatacg 120
 agagataatg cacagggatc aagatgggtga tggaaagtta atctttgacg aatactttac 180
 tgggctacat gaccatagac atgggttatgg tgacgagaat gcagatattt cgcagattgg 240
 gaagataaga gttgcgacgg atcggtttta caaacgtgag atagataatg atggggtttag 300
 ttcggagcat gaactacagc ctgttct 327

<210> 225
 <211> 338
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-A5

<400> 225

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 accttcattc tcaactgctga acttgctgct gctccttcag cagttggacg atgaggacaa 120
 actgcaacaa gtgtcaaagt ctctctcaga gttcattcgg aaagccacgg tggtttgcgg 180
 agaatgagaa atgttggagc ggcgtgtagg atcaccgaat gcatagtacg gctccatact 240
 tctgctctgt ttctgcctgt aactcaactg tgaaaagtta taaactttca gaaagaaaaa 300
 ccgtgagagg tgcaggttca agttaatatg aataataa 338

<210> 226
 <211> 273
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-A6

<400> 226

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 attcattaaa gtgacgttcc atactaatgc tccgcacacg cctgccaat atgaaacagg 120
 tgtatctacg gtcttcagtg tcatgcgtat cttctcggag accaatgatg ctgctaattg 180
 atacggtcat gagcataagg attaaccgct tgcgatgaat atgtgctcaa cgtcgacggt 240
 ggccgtagca cagtatgaga tgtctctccg cac 273

<210> 227
 <211> 104
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-A8

<400> 227

aattcccgga cagacccacg cgtccagact ttctcacagt cgccgccgct gtacattgtc 60
 cactgcgctc tgttcaacga ctttgacaca tcgacgggaa acgg 104

<210> 228
 <211> 303
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-B1

<400> 228

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 tcgccgacaa ggtcgcgctg tgccctgccca gcgacggcag gtccacgtcg ggcgacagcg 180
 tcggcggtggc catcttcggc ggcggcccgc tgttcttcgt cccccggac cgcggcgact 240
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 ggt 303

<210> 229
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-B12

<400> 229

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 aagatagaag tttctcaggt tcatttgga ctgttgaagc gtactaatgt tctcaatgat 120
 gcattctata tatcacatga tggagtaatc ggaacaataa ataactttcg cctaggacgt 180
 ctttctaata tagagggtga gtgggatgag ataaatgctg catgggggtca ggctgcactg 240

ctgttgcata ccatggctca gtatttcacc ccaaaattcc aataccgat caagattcac 300
cctatgggaa gctatccaag agtcacagac atccagaata acacatatga actgttttgt 360
cccgtgaatt tgttctggag cacccgattt gacaaagcca tgacatgggt tcttacttgc 420
ctgca 425

<210> 230
<211> 334
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-B2

<400> 230

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tcagggagca atgtgaacaa gaaagaacag tctgcactgc gagctgtcat caagtgtgtt 120
gaggatcgtg aactagaagc tgagtttcca ctggagggtc ttcggaagca acttgaagaa 180
ctagagaaag ccaagaccga gaagaagaag gcagcatcaa gcgctaccag tggcagcagc 240
ggcggccctg caaccaagcg catccgtgcg agcactggag gcccaatgcc tcctgccaaa 300
gcacgtcgtc tcactaacia tgcttgctgt tctt 334

<210> 231
<211> 343
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-B4

<400> 231

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gcggagctta attagcaatc attgactatg ggtgcgtctt tgccatggct ggcattgttg 120
ctcgtctccc tcgtcggcgt ctacctctc ggccatctcg tgcaggcccg tcgtcgtcgt 180
ggtctaccgc cgggacccca cccgctgccc atcatcggca gcctccacct gctcggtaac 240
caaccgcacc gctccctcgc caggctcgcc atgactcacg gcccgctcgt gtcgctccgc 300
ctgggctcgg tgaccacggt ggctgcctcc tctccggccg ccg 343

<210> 232
 <211> 339
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-B5

 <400> 232

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 cctagccacc cagggagaaa gagggcaaaa gggaggggag agtgtcgtca tggcttccat 120
 tgtcgcttcc aggagggccg ttcctctagt tcgcgctctg gagaagctca tcgcagcgtc 180
 ctccgctccc gggactggct ccgccctcag gccggtggca gtcgccggcg gcctccgcgg 240
 ctacaacacc ggcgctccgc tccgacgcta cgagggggcc gagtcggaag acgatagcgt 300
 ccgcgagtac gatgggcggc acggcggccg ggactacgc 339

<210> 233
 <211> 136
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-B6

 <400> 233

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 ctactatcca ccgacggaca aagtggccag aagggatggg acactgtcct cgattccctc 120
 cagttgtccc attcca 136

<210> 234
 <211> 341
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-B7

 <400> 234

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 gaaagcagac caacctatcc acgcagtgag aaagaggcca aaaggaggag gagagtgtcg 120
 tcatggcttc cattgtcgtt tccaggaggg ccgttcctct agttcgcgtc ctggagaagc 180
 tcatcgcagc gtctccgct cccgggactg gtcgccct caggccggtg gcagtcgccg 240

gcggcctccg cggctacaac accggcgctc cgctccgacg ctacgagggg gccgagtcgg 300
aagacgatag cgtccgcgag tacgatgggc ggcacggcgg c 341

<210> 235
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-B8

<400> 235

attcccgggc cgacccacgc gtccagccgg aggctcctgc tctgtctggt cccaggagc 60
cggccgccga ggcggaggag gttgctgctc ctgaggagcc cgagaaggcc agcgagttag 120
gccgtgcgca cgcagcggcg gcgccaggc cccaggggat cggcgtgcgc gcgtggcggg 180
gtagtcgctc gcgcgcgtac atggcagtat gacacgggat tttgctgttc agtacgctac 240
ggttattact ggcgtctctc tctgtgtgtg tgtgtgtctc gtacgtagcc cggtacgtag 300
ctagcagtga ctgtcgcgtg gacgtgtccg gtgcgggc 338

<210> 236
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-C10

<400> 236

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ggaggcggag gcgaaggcga agggcaacgc ggcgttcgcg gccggccgtt tcgaggaggc 120
tgtccagcac ttcagcgacg ccacgcgct cgcgcccgac aaccacgtcc tctactccaa 180
ccgctcggcg gcgtacgcgt cgctctggcg ctacgcggag gcgctagatg acgccaagcg 240
gaccgtggcg ctgaagccgg actgggcca ggcctactcc cgcctcggcg ccgcgcacct 300
tggcctcggg gacgcgcccc aggcgcgca ggcctacgag aaaggccttg cgctcgagcc 360
gtccaatgag gcgctcaaat ccggcctcgc acaggcgcgc cagtccgcat cggcgccgag 420
acgtccggtg ggct 434

<210> 237
 <211> 329
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-C3

 <400> 237

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 cggggacggg gccggacgtg ctgccggccg acccctacta gcgcgcggtg gcgcggttct 180
 ggggcgcgta catcgacgac aagggtggagt cagcgtggct ggggatgctg ttcagggtgcg 240
 cgaacgatga ggagagggcg gcggctgtgg cgcgcgcccg cgaggcgctc gacgcgctgg 300
 aaggcgcggtt ccgggactgc tccagcggg 329

<210> 238
 <211> 348
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-C4

 <400> 238

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 cctcccttcg cctgtgatca tgtcgtcttg ctgcggcggc aagtgcgggt gcggctccag 120
 ctgctcctgc ggcagcggat gcaacggctg cggtatgtac cctgacgtgg agaccgccgc 180
 caccagcagc gtcaagacca cggctcctgc cgcgccgacc accaaggcca gcgccggcgg 240
 cttcgaggcg gccaccgagg gcggcggctg cgactgcaac acctgcaagt gcggcaccag 300
 ctgcggctgc tcctgtgtga gctgcaactg agctggcccg gcccggcg 348

<210> 239
 <211> 341
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-C5

 <400> 239

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cgctaatagc agttgagatt gaaccagcga acggttttct aaactcggaa gggctggcat 120
 cactgaagtt cagaaggata tcatcatcct tgtcaatggg aaggataaac tgcaagggttt 180
 actactgtaa agaagatgaa gtttgtctct accaatcgat tgcttttgat gtcaaattcc 240
 gtgaagaggc ggaaccgaac ccagcacaaa ttacgctatc ctatactgtt tcgccaagag 300
 ataattcagg tagcacacaa ctactggctg ctaaaaagaa t 341

<210> 240
 <211> 337
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-C6

<400> 240

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 atgtgtctgt ctgtggtgtg tctctctgac ggccccatgc gtcagcgta ctgcttgctt 180
 cagttctgca tctcactctg ttgaggtgaa aaactgataa catctttgca gtgctagaaa 240
 acctgagaac ctcatgatat ctaagtaact gagccaagag agagagagag agagagagta 300
 tctaagtacc ttgatccact tggacagcac agttaga 337

<210> 241
 <211> 311
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-C7

<400> 241

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 ctttgctaca gattctcaag gagacagcgg cacgaaatca tgcctcatta tcaaacccaa 180
 ccaattctgc agcctcagaa agagtactgg aactacaaga gaagattggt gattcaaata 240
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 atgttattgc t 311

<210> 242
 <211> 337
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-C8

<400> 242

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 caaaatatca ggtctggcct cgaatctctc tgctgaggct ggggggaaag gtgcagataa 180
 gaagaacctt actgaccaa gagacttggt tcaacgaatc ttagattttg tcaagtatgg 240
 tgactgccct gaagaatcaa tcaagattgc tggaaaacgt gatgttttaa ggggtgtcatc 300
 gtggtctgaa ttaatccagt tgaatttctt aaagcgg 337

<210> 243
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-D10

<400> 243

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 cacctcggag tccgtgaacg aggggcaccc cgacaagctg tgcgaccagg tgtcggacgc 180
 cgtgcttgac gcatgcctcg cgcaggaccc cgacagcaag gtggcctgcy agacctgcac 240
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 gaagatcgtg cgcgacacct gccgagat cggttcacc tccgacgacg tgggcctcga 360
 cgccgaccgc tgcaaggatg tggatgaacat cgagcagcag tcccccgaca tcgcgagggg 420
 cgtgcac 427

<210> 244
 <211> 342
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-D5

<400> 244

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caggtgcagg acggctctga gatccgggct ctctgtggaga acaaggcgga gttcgttagg 120
ttcgtcgacg acaggttccg gaagctcgac gccgatggcg acgggaagct gtcggtgaaa 180
gagctccagc cggccgtcgc tgacatcggg gccgccatcg ggctgccggc cagaaggctc 240
tcgccgcaag cggaccacat ctacgaggag gtcctaaacg agttcactcg cgggaagcaa 300
gagtccgtgg gcaaggccga gttccagcgc gtgctgtccg ac 342

<210> 245

<211> 340

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-D7

<400> 245

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aagatcggca ttcgaagtgc aaagttgaaa ttacatgtgt gcttttgaaa cttaaagggc 120
aaatacacia accgacactt atctacatgg ttttccaccc atcacagtgc atcttgctta 180
tctacttaaa cgcactcgtt tgggtctcaa taatactgcc acagcatgca gggaccatct 240
ctttgtttct ttgatgtctc atggcacaat tattgggctg cttagttgct atattctaaa 300
aaagaatctt tttttttttg gtgtagtagg aatgtaggat 340

<210> 246

<211> 276

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E6

<400> 246

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cagagaccag gaaccaaata cgagaaatat cacggaacaa aaaagcagaa tccttcttgc 120
gagccgcagc tatttgcagc aagacttccc attcccacta acggctgccc ctgcccctgc 180

caatcatgtc gttgtagtgc ttgagcgact cctgccgctg cagccgcac tccatgttga 240
acttgtggat gaacgcctcc acgcggcggg tcagct 276

<210> 247
<211> 326
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E7

<400> 247

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ccctcccccg gcgccgctga tcgacgcggc tgagctgggg tcttggtcgc tgtaccgcgc 180
cgtgatcgcc gagttcatcg ccacgctgct gttcctgtac atcacggtgg ccaccgtgat 240
cgggtacaag caccagacgg acgcgtcggc gtcgggtgcc gacgcggcgt gcggcggcgt 300
gggggtgctg ggcacgcct gggcct 326

<210> 248
<211> 193
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-E8

<400> 248

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tgttcggtct gtttttgcca cctgttcgct agcggttctc gcggccctgc gttgtccgtc 120
tctgggtacg ctgtgtcgcc gccggcgctg tgctctggct cctctcgttg gtggtccagg 180
tgctgctggt gct 193

<210> 249
<211> 361
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-F1

<400> 249

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cgcccgactg tcagtcagcc tcagccatgg ccgcgaggga ggagcagggc ttccgcccgc 120
tggacgagtc gtccctgctc gcctacatca aggccacgcc ggcgctcgcc tcccgcctcg 180
gcggcggtgg cagtctagac tccatcgaga tcaaggaggt cggcgacggc aacctcaact 240
tcgtctacat cgtgcagtc gagggccggc ccatcgctcg caagcagggc ctcccgtacg 300
tgcgctgcgt gggggattcg tggcccatga cgcgggagcg cgcctacttc gaggcctcca 360
c 361

<210> 250
<211> 436
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB143-003-Q1-E1-F10
<400> 250

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ctgccctctc cttcgctga ggcggccccg gcgaccgctg cggcagtgca agaccagacc 120
gaggcttctc ccgttggaag gttccagcca tggcgagcgc cgatctgctg cggaaggagg 180
aggagttcta ctctccctc tttgattccg caaaaggcga cggcgtcaag tcgcgctcgc 240
aggtgattga gaggaagatt gaatccctcg aggacatggc caccaacgtc agcaaccgga 300
gatcaagaag atggttgaac gaccgcttgc tgattgagct tgtcncacgc cttcatgttg 360
aagaaatcaa aggcctcttt gctcctccac catgggggtga ggagctgccc ttgtcagcat 420
tctgcaggac aagtgt 436

<210> 251
<211> 343
<212> DNA
<213> Zea mays
<223> Clone ID: LIB143-003-Q1-E1-F3
<400> 251

gggtcgatcc acgcgtcggc cctagtcctc tgtaacttct cctccgccc cactccct 60

cccattcacc gccaccgcca attccatacc gtctctcgcc acctctgctg agagcgagaa 120
gagatggcag gcaaggggtga tgggcccggca atcggcatcg atctcggcac gacgtactct 180
tgcgtcggcg tctggcagca cgaccgtgtc gagatcatcg ccaacgacca gggtaaccgc 240
accacaccct cgtacgtcgc cttcaccgac tccgagcgcc tcacgcggaga tgcggccaat 300
aaccagggtcg ccatgaaccc catcaacacc gtctttgatg cca 343

<210> 252
<211> 347
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-F4

<400> 252

cccgggccga accacgcgtc gaacgttatg tcagaagggtg catatatgct tttctacatg 60
aggtctttcc cccgaccacc aagaatatac atcgagaagg ggccgactgt tccatccgcg 120
aagcgccaca catcaaagta ttccaagggc tctaaacacg agcgcgagca gacagagtta 180
ctcctctcgg cgaacgatcc agcatacggt gtttatgact ttagaccgga tggcgagggc 240
tacacgcaag atcagcaagc agagttgaga tccagggaat tccatcgcgc cgacgatgcc 300
ttcgcagact cggttagcgc ggacttctcg gaggccacgt caagcga 347

<210> 253
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-F5

<400> 253

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cgcccacgcg tccgtgaaga acaaggtttt ctccattgat ctcgtttcag atgaaccttc 120
agtgattgct tgtgatatgg ctcatactcc attggagcca tcctctatag atgttgcaat 180
attttgtctt tctttgatgg gaatcaacta tccaagttat ttagaggaag caaatagggt 240
tctcaaacca agtgggtggc ttgttattgc tgaagtgcga agtaggctag acccgagcaa 300
cggagggtgct gatcctgaaa agttttctaa agccattatc cagcttggc 349

<210> 254
 <211> 338
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-F6

 <400> 254

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 gcgtcaagct cggcatccag ggattcgagg tgtccaagct ggggttcggg tgcattggggc 120
 tgacggggcg gtacaactcc ccgctggacg acgaggccgg catcgccgtc atcgcgcacg 180
 ctttcagccg cggagtcacc ttgttcgaca cctccgacgt atacggggcc ctcaccaacg 240
 aaatcctcct cggcaaggcg ctgaagcagc tgccgcggga gcaggtgcag gtggccacca 300
 agttcgggat acggcatgac gagagcggca cgcggaacc 338

<210> 255
 <211> 340
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-F7

 <400> 255

 attcccgggc cgaccacgcg gtccacgcca ctccccaacc gtcccatgac gcaggctcag 60
 cactagcagc catgcccgcac ctctgtctgc ttctcttctt cggcctcggc gggctcctgc 120
 ccgcggcgtc ggccgcccgc gagcagttcg tgttcgacgg cttcaagggc gcgaacctca 180
 gcctcgacgg gatggccacg gtcacgcccg acgggctgct catgctcacc aacggcacca 240
 gccagctcaa gggccacgcc ttctaccggc cgccgctgcg gttccacggg gcgcccgcag 300
 gcacggcggc agcgatggag tccttctcca cggccttcgt 340

<210> 256
 <211> 271
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-F8

 <400> 256

attccccgggc cgacccaacgc gtccatcccc tccacgctcc ctttcccttc ctctacctcc 60
cctacccccgc cgccccgcaa tggccggcct cctccacctc cagtccacgc ttctaccctc 120
ggcatccgct ctccgcccgc gcgcgggcgc gccggtgcc tgttcgtccc gccgccgatg 180
ccgggtcaag gcaagattcg ggagattttc atgccggcgc tcaactccac catgaccgaa 240
ggcaagattg gtccctggaa cgccgcccaa g 271

<210> 257
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-F9

<400> 257

aattccccggg ccgacccaacg agtccagctt cctgctgagc tcaaaccct tccgcctccc 60
catcaaccat tccatccgcc gccgcccgcg cctgcgcatg atgaatgtgg ataagctcaa 120
caagatggct ggcgctgtat gcaccggacg gaacggcagc atgcgcatga agaagaaggc 180
agttcacaag accacgatca cagatgataa gcggcttcag atcaccttga aaaggatcag 240
ggggaacacc attcctggta acgatgaggt caacatcttc ataggacgat gttgttatcc 300
agtttcagaa cccgaaagtg catgcatcca ttctgcaaa tacataggtg gttagtggag 360
taccccagac aaaaagtctg caagaccttc tgccatcagt tatcaaccaa ctgggccttg 420
ataacct 427

<210> 258
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G1

<400> 258

tcgcgggctcg aaccacgcgt cggcccacgc gtccgcccac gcgtccgccc gtttcgagcc 60
agggcatcct cgcgtctcgc tctcaccctt cctcggcgcc tccccacca cagtgtaaag 120
cccctgtccc ttctccccc ccgactcgcc cctcatggcg aggaggcgct gctgatgcct 180
cgcggcgctcg gatcggacgc ggcggccacg acacctagcc gcttgcggtg gcgctcgct 240

acgcgccc aa tccgccgacg ctgctcctcg gacccccga gagattcagg ccccgctctcg 300
cctcgtcctg cctagtgcct aggtgaggct ctggccttca aaggtgcgt 349

<210> 259
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G10

<400> 259

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atccatggac tcggaaggag ttgtagcagc aaaggtggca gatgagacta ctaaaccggc 120
aatccaagaa gacggcgccg agagcaaggc cgggatgact gatctgctga tgctgaccga 180
caagtcgcag ctgcaggcgc tggcgatgct gctgcggaac aacgaggagc tcatgatgag 240
ccaggcgatc aagtcggaga cggagcgcatt tgagtacctc aagacggtga gcgactgcta 300
cacgcggacg atgaagctcc tcgacgattc catggcggcc aggaccacgt acgagcgctc 360
gggcggaatg aggagcctcg tcgcccggga catggacgac tacgtcgtct acggcctcaa 420
c 421

<210> 260
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G11

<400> 260

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ccctgaagcc cggcgacttc tgtggcgagg agctcctcgg atgggcgctc gtccccaaagc 120
ccaccgtcaa cctgccactg tccacccgga cggatgaaggc ggttctcgag gtcgaggcgt 180
tcgctctcca ggccgacgac ctgaggttcg tcgccagcca gttcaggcgc ctccacagta 240
ggaagctgca gcacacgttc cgggtactact ccaccactg gaggacctgg gccgcgtgct 300
tcatccagca cgcttggcgc cgcttgagga ggaggaagat ggccaaggac ctgagctctga 360
gggagtcgtt ctgctccacg ggaccgtacg aaggcgatgg cgacgacgcc tcctccccctg 420

aacagagtat

430

<210> 261
<211> 219
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G2

<400> 261

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tctctgcctc cagtccatag ccactctgac tatctgcccg attccgcctc ccggttcctc 120
ggacaccctc gcctcctcgg atagtctggg tcgacggtcg gcctagcttc aatttcaggg 180
atggtgttct acctgacggc gcggtctcat ggcggccac 219

<210> 262
<211> 252
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G3

<400> 262

tcccgggtcg aaccacgcgt ccggcataca ctccgttcac tctgctatct ctctagattc 60
cgtctacgcc tacaactttt gggctctctc ttctttccac gatatcgctt ctagtggctt 120
cggacacaat cgaagggtccg gctattggga ttgaactctg aaccaactaa tcttgcgtcg 180
gactgtgaca tcaactgccg attgagatca tcgccaccta tcatgggaat ggcattcagtc 240
tgtcatatgt cc 252

<210> 263
<211> 356
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G5

<400> 263

ggtagcggct caagaattcc cgggccgacc cagcgtcca cccgctccg cctccactcc 60
tcgcgccgct gccgcatctc ctctacaggt aagaaggaga gaaagagggc gaaatgggtga 120

agcacaacaa cgtcaccccc aacggggcact tcaagaagca ctggcagaac tatgtcaaga 180
catggttcaa ccagccccgcc cgcaagcaga ggcgccgcat cgcacgtcaa aagaaggctg 240
tgaagatatt cccacgacca actgctggcc ctcttcgtcc cattgttcaa tgccagactc 300
tcaagtacaa catgaagtca agggctggga gaggctttac ccttgaggag ttgaag 356

<210> 264

<211> 336

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G6

<400> 264

attccccgac cgacccacgc gtccaataca catgcagcca agaacacctt ttggtgcatt 60
tcttgatcct gtggtgaca aggtttcttt ctctctccac tgcccacat ttcttggcat 120
gtttacaact aagaatatca gttctcaaga tgagctactc acaggatcta atttaattgc 180
tctaattctt tactgcagct tatggtagcc gcgacattag ttttactatg caccaaact 240
ttggaaacat cactgctcaa tgatgggcca tggcttctaa cagtcccttc cattgctatc 300
attgggagag aagtagttac tctgccaatc tgcatt 336

<210> 265

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-G7

<400> 265

aggtagcgct caggaattcc cgggccgacc cacgcgtccg ctccaccgtc gtccgccgcc 60
gccgaaggac ggaaggagaa gagggtagcg ccgtctctc gccccatgg cccacgagaa 120
gaagctgtcc aaccgatgc gggagatcaa ggtgcagaag ctctctctca atatctccgt 180
cggggagagc ggcgaccgtc tcaccgcgc cgcaaagggtg ctcgagcagc tcagcggcca 240
gacccccgtc ttctccaagg cgaggtacac ggtgcggtcg ttcggcatcc ggcgtaacga 300
gaagatcgcc tgctacgtca cgggtgagggg cgagaaggcc atgcagctgc ttgag 355

<210> 266

<211> 335
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-G8

 <400> 266

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 tgttaattat atttgtgggt cttagtctaa aatcacattg aagagggaga cggacccaag 120
 tgatgcagtt catgtgtcat ctgtatcagt ctctatTTTT ataagctgtc atatgttttc 180
 tcgaaactat cttgtgttga ttttgtgtga tgtgtacttt taatggcaca gggccatgta 240
 tttccttga aacgaccata agagtttgta tatggactta ttttttctcc cattttcttt 300
 cttgagatgg gctgtatatt tgcttgaaag ataag 335

<210> 267
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-G9

 <400> 267

 attcccgggc cgacccacgc gtccagcgtg cttcctgctc cgcttctcta cgggtgggca 60
 tgccatgggc agcttcgggc tgacaggcgt gtccgtgtgg gaggcgctgg tgctggagat 120
 cgtgatgacc ttctggctgg tgtacatcgt gtacgccact gcggtgtaag cgaagagggg 180
 cagcctgggc aacatcgccc ccattgccat cggcttcacg gttcgggcaa acgtccagga 240
 tgggcccgcac cctcgacggc gcgtccagtg aataccgccg tgcgttcgg cctcgccctc 300
 gtcagctggc agtgccggcta ccaatgggtg taatgagtcg ggcgtctcat cggatgcgga 360
 cactccggcg ttatctacga gctgctcttc atct 394

<210> 268
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-003-Q1-E1-H11

 <400> 268

aatgcccggg ccgacccacg agtcaagaaa cctaaagtca ccaggatttt cacaaacccg 60
attcgctcag tggacacgat tcaatacccc ccacctcaca catgattcga acaacgatgt 120
ctctgactcg ccgtggagat gctgtctatg tattctctga tgacagatgg gaccttgacg 180
atggcatccc attaggctct ggaagctcca gcaacaacgg actgtaccct gcggtcgaag 240
gcactaacag atttcacacg gccgcgttcg ctgggtgctcg aatgtaccga caggaaactc 300
cagatgcaca ggtcttcaca accaacttca cagggtctgag aaatgatgat gtgaagggtgc 360
atctggaaga 370

<210> 269
<211> 346
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-H3

<400> 269

tcccgggtcg aaccacgcgt ccaacctaca gcagctacac gctggcgctc ccacggtcga 60
cacgacggtg acgaccagtg ccgcactcta cctcggcccc gaagtcgaac ctgaaaattt 120
tggaacaat ggaagaggaa gagtatagcg ctgaaatatt taatgaacaa gatggcgaaa 180
cagaatgaaa tgctggtgag agtgatgtct tcagaaccag ttgatgtaga tgcagcatgt 240
ttacgaagag tacggatgat atttgactct gaggaagatg cctttcagtt ttatgtgaca 300
tatggttgtc acgcagggtt tggtactaca agaacatcta acaata 346

<210> 270
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-H5

<400> 270

aggtaaccgt caagaattcc cgggccgacc cacgcgtcca cgcaatgggg catgatctga 60
agaagttttt ggggtgtgatc gtgggtctgt gggttctctc cggagtggga agcagctgtg 120
acttcctcac gttgacatac attgccgtcc tgatgtcca cacggtgcca atcttgtagc 180
acaagtacca ggacaagggt gaccatgtcg ctggaagggc acacaccgag gccctcaagc 240

agtacaaggt gctggatgcc aaggctctga gcaaaatccc caggggtgcg gtcaaatcca 300
 aaaagcagaa ctagttagga taagccgcag attgtgaatg cccgtatcat ga 352

<210> 271
 <211> 214
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-H6

<400> 271

aattcccga cccgaccac gcgtccactc catgtggaac tatgtgaaca ttttggtgga 60
 tctgctgttg ggtctgtggg ttcggctctcg atctggctgc agcggtcacc tcatcatgtc 120
 atctttgatt ggagtcctga tgcttcacac ggtgagagtc ttgtacgata gatatcaggt 180
 gcacgtggac catatcgctg gttagggaca cagc 214

<210> 272
 <211> 124
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-H7

<400> 272

ggtaggctca ggaattcccg aactgacca cgcgtccagg gatatatatg tgtttccagg 60
 tagttggaga ttcgaaacga accagtgatg tagatttgtt tcatctaaat atatgctata 120
 gttc 124

<210> 273
 <211> 322
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-H8

<400> 273

taccgctcag gaattcccg gccgaccac gcgtccagt ccatcgcttg tgacaagcta 60
 tcgtcaattc gctaccctgc gagcaggcat tggcctatgg atgtggcccg aaggctagcg 120
 gaactgggcc tgaggtacac tgaggacaca agccgggatc gcccacacct gactgctgac 180

actgtacgag agctgggaca gctacacgtc accagggacg aggaacaagc aacctccact 240
 ttccggtgct cgattatgca agagataatg catgacccctc atgtctgcac agctgatggg 300
 gtgaccaact actggctggc ga 322

<210> 274

<211> 97

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-003-Q1-E1-H9

<400> 274

tccccggggcc gaccacgcg ttccagccca tgctgacggt acccgaacca tacaatcagc 60
 ttccgttga ggaaacgtat caggatactg tgcccg 97

<210> 275

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A1

<400> 275

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 agaagcttaa gaagatgctg agcgccaacc cagaggcccc actgaacatt gagtgcttga 120
 tggatgagaa agatgtgaga gggtttatta agagagagga gtttgaacac atcagtgcac 180
 ctgtgctggt acgtgtcaaa ggacccttgg agaaggcctt ggctgaagct ggcttgacaa 240
 ctgaaaatgt gcactttgtt gaggttgctg gatctggttc tcgtgttcca gccataatca 300
 agataatcac tgattttttt gggaaggagc cgagacgaac catgaatgc 349

<210> 276

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A4

<400> 276

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catcgcaaag ttcaacacca taggactcga tggccgcgcg ctcgaccact tcaggctcta 120
gctacctggc tacgtttcag attcgtcctt tcatttgctt tggctcttaa ttaataattc 180
caaataataa gcccgcggat ggacctctgt ctgtctgtct gtaatttagt ttccaagttt 240
aggtagtgtt tggttactag ggactaattt ttagtccttc tattttattc cacttttagt 300
tataaattgc aaaatatgga aactataact ctattttagt ttccatattt gacaatttag 360
ttacta 366

<210> 277

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A6

<400> 277

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gattccgcca gtacgccacc accaccgagc ctggactacc gccgccgcc ttccgccgata 120
tcttcagcgg cgaacagcgc ccaccagatc ccgccctgc gatggagtcc gtggtgaacc 180
cgaaggcata cccgctggct gatgcgcagc tgacgatggg taccctcgat atcatccagc 240
aggccgcca ctacaaacag cttaagaagg gagcgaatga agcgacgaag accctgaata 300
ggggcatatc ggagtttgta gtgttggcgg cggacacaga gcctctcgag atcctgct 358

<210> 278

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A8

<400> 278

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cccgcagccg gcagccccac caccaccac atggccgcca tgccgggtgg ggccacggc 120
gccggcgccg cggacccgat gcaggtggac cagccgctcc cccctgccgc cgcaggcaca 180
gcacacgccc ccgccgacgc caagcatgct ggttctatga ttgaaggag tgatccggtc 240
acaggccata taatctcgac aaccattgga gggaagaatg gagagcctaa aaggactatc 300

agctacatgg cagagagagt tgtgggaact ggatcatttg gaatcgtctt ccaggcaaaa 360

<210> 279

<211> 328

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-A9

<400> 279

gggccgaccc acgcgtccga aagcagcgat ccgaagctca atcaattcac tcaaacctct 60

tccccaaatc ttcgattaga ttctcgttga caagaagact agaaccgaac ctgaccatgt 120

cgctgatccg ccgcagcaac gtgttcgata ccttctccct cgacctctgg gacccttttg 180

agggcttccc cttcggctcc ggcaacagca gcagtctctt cccctcgttc ccgcggacca 240

gctcggagac cgcggccttc gctggcgcgc ggatcgactg gaaggagact ccagaggcgc 300

acgtgttcaa ggccgacgta ccggggct 328

<210> 280

<211> 221

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-004-Q1-E1-B1

<400> 280

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caatgtttgc cgcccgggtc cgcccgccta tgtgtggcct gccggactt ggtgggggtg 120

tttcgttgtt tccgtccact ttatctgttg cctatcattt ccttagtgga tatttacttg 180

cgccgtagt gttcgatata ttcaacacct tctgaattca t 221

<210> 281

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B2

<400> 281

tcccgggtcg aaccacgct ccgaacttta ttgacatgac attctaactt gatggagcag 60

gatgaccaag aaggtgttag aaccgtagat gatgataatt tcattgatga cactggagtt 120
 gatccagctg atcgttatgg cagcgataat gagcgacatt cacctggacg ttatgcacag 180
 gctgaggagg gtgaggagga cgatgaaatc gaacgactct tcaaggggtg taagaagaag 240
 aagaagaaga atgatcgccc tcgtgcagat attggcctta tagtgaaca attcattgct 300
 gagtttgaag tagcagccga agaagatgca aacttgaata ggcaatcaaa accagccatt 360
 aacaaac 367

<210> 282
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B3

<400> 282

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 gggatgttcc tgatgagaag tacaccaatg ccttccttgg ctttgggcca gagaacacca 180
 actttgcagt tgaattgaca tacaactatg gcgttgacaa gtatgacatt ggaacgggct 240
 ttgggcattt cgcaattgct aatgatgatg tgtacaagtt agctgagaat atcaaatcca 300
 agggtggtaa gatcaccgcg gaacctggtc ctgtcaaggg aggatccact gttattgcct 360

<210> 283
 <211> 359
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B5

<400> 283

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 aaaaaaaaaa aaaaaaaaaa aaaaggtata agaaaaaaaa aaaataagaa aaaaggaaat 120
 aaaaaatgaa aaatcacaaa aggggtaatc aataaatttt ggaaaaaaaa aaggggggggc 180
 cgccctaggg gttcaaggct tacttgccct tgcattgcaat ttcatacccc ttctagattg 240
 tcccctaatt tcatttccgg ggccgtcttt ttacaacttc gtgccgggga aacccttggg 300

ttttcccaat ttaaccctt tgcagcaaat ccccttttcc caattggggg taataccaa 359

<210> 284

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B6

<400> 284

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ccggcgactg gtgggccgcc gccaccctaa gttgcggagg ttacattgg tctcttcgcc 120

ggcgacgagc acccaccagg agtcttgaca agtttttcca atggaccaag taccgaatgg 180

aaggcataag gtttcttttg cgaagccaag agtagttgtg ctttcagatt ctgactctga 240

ctctgaaggt tttgtagaag agctaactcc tgttcactca aagtcaaacg ggaaggcttc 300

atctgcgagc ctaaaaactg gtggaaaggc ttcagccttt tctaaagggtg aggcaag 357

<210> 285

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B7

<400> 285

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catctccgac tccgcgtccg cctcgcgcag gacatatatt cagtgatgga acacaaggag 120

gccggctgcc agcagccgga gggcccaatc ctatgcatca ataactgtgg tttctttgga 180

agcgctgcca ccatgaacat gtgctccaag tgccacaagg agatgataat gaagcaggag 240

caggcccagt tggctgcctc ctccatcgat agcattgtca atggcggtga taatgggaaa 300

ggacctgcaa ttgctgcaac tgtagggtgtg gcagttcctc aagtcgagga gaag 354

<210> 286

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-B8

<400> 286

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acgacagctg ctccgacgac gtggaggagg ccgtcgccca cctcaacggc ctcgctccggg 120
agcccaccga cgccaagtgc ctcgagctca agtcgtgggt ctctccacg ctcggcggca 180
ccgccacctg cgaggacgcc tgcaaggacc tgcccaagac cagcgacaag gacgacgtcg 240
tcaacttcag cctcgacttc gagaagctgc agcgcgtcac gctcgacctc atcaccgatg 300
cgcccgccac catgtccgca ggcacgccc tgccaccctc caacgccgga gcgccctcc 359

<210> 287

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-C1

<400> 287

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tcttcacccct acgcgagggc aaaaccaca aaccctctcc ctcccgact cgggcctaca 120
catccagggg cgatgacgct gggtagctcc ggcgccgat cgagcgctcg cgttccccga 180
aacttcaggc tattagagga gctcgagcgt ggagagaagg gcattggtga tggaacagtg 240
agctatggaa tggatgatgc cgatgacatc tacatgcggt catggactgg taccatcatt 300
ggccctcaca atactgtaca tgagggtcgc atctaccagc tgaagttgtt ttgtgacaa 359

<210> 288

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-C12

<400> 288

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aacggaaccc acggaggagg tgggtgtcatt tcctgggata aaggggcaat tgatgcattg 120
aacggcaaca cgggtaatgc tattgggact ggtggatggt aagatttccg ccaatataat 180
atgaactctg tcggtgctg tgtctaattc gtatccgtta cttctccatg tgtactctac 240

actatctcga acatggcttg tgaccattta tacatttaaa cattacctta ttggtggcag 300
tatcaactaa gagatatttg tgttcgaaga ccgaaacata atgcaaaggt atttcaacaa 360
tgtacagggc tgccgctcta aaggatccac acttacgtat gcatacatgc 410

<210> 289
<211> 368
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-C2

<400> 289

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ctaggccagg tcattcagct ccaagggtgac cagcgcaaga atgttgctac tttcctagtt 180
caggctggga ttgcgaagaa agagaacatc aagattcacg gggttctaagg gacctgtaaa 240
tgcttggtgcc ctatattgtg tgcctcaaca tattggggag cttgaagcat cgacagttgc 300
tagtcattgc ttacttatat aagaacataa gtagtatttg ctattgtcaa gtgtgccttg 360
cttgatgc 368

<210> 290
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-C5

<400> 290

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ccgtacccaa tctaattcgc acccggccga gatgggccgc aagttcttcg ttggtggcaa 120
ctggaaatgc ctggaagagc ccgcgttctt cttccaatgc gcctgtgctt ccagggtcca 180
gcccagagca aatcgtaaaa gcccttcata agtttcgtga tgcattgtgt ctgtaggagc 240
agaggagttc gatatccaac ttttgagagc ccattctcgt ttgctgcacg aattaacctt 300
acgtttcttg tcatggagct cggggcttgc tcaatctgag catagggttg ag 352

<210> 291
<211> 357
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-C6

<400> 291

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actgcacca gagcgcgatc cattgccggg gaagaagcaa cttgttgca gcctcctcta 120
tggcgagctc cgaccatggt tccaccaccg cccccaagga cgtgccgggc agctacggcc 180
tgccgctggt gggcgccgtg cgcgaccgcc tcgacttcta ctacttccag gggcaggaca 240
agtacttca gtcccgcgtg gagcgtacg gtcaccacgt ggtgcgcag aacgtgccgc 300
cgggcccctt catggcgcg caccgcggg tgggtggcgt cctggacgcc aagagct 357

<210> 292
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-C8

<400> 292

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aaccggggccg gccgacacaa gcagcatccc gtcggcgcg atggacctgg cgtcgagcga 120
cctcgcgcg ctgggcgcgg cggagctgat ccgcgtctcg gcgtcgatcc cgcgcgcggc 180
tccgcgcacc ttcgcgtgc tcaccgctg cctcgtcttc ccgctctct tcgccgtgct 240
cgcgcactcc ctcttcaccc accccatcct gtcccgcatc cggggcgccg cccactcggg 300
gttcgcgcgg tggctcggcc tcttcgcgta ccagttcatc tacctcatcg tcctcttcac 360

<210> 293
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D12

<400> 293

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tatgcttcct gcaggtgaaa tgtgatctgt agtgatgctg tccccgaagt tcagcaagca 120
 tacacaaaga cagtccctgct gctaagtatt tgatggagcg tgggtgtggac cggaaggact 180
 tcaactcata tggtagccgt cgtggtaatg atgaagtaat ggcaagggga acgtttgcaa 240
 acattacgat cgtgaacaag tttttgaacg gagaagttgg acccaagacc attcatgttc 300
 ctactgggga gaagctttct gtttttgatg cggccatgag atacaaatct gatggccatg 360
 ctactataat cctcgctggg gctgagtatg gaagcggcag ttctcgtgat tgggctgct 419

<210> 294
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D3

<400> 294

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 ttctcgcggg cgcgggcgcg ggcgcggggc gcgggagcag gcatggcgct gcaggtcgct 180
 gggtaacccc cggcgggtggc ggcgcttggg ttcttcttcc cgaccttctg ggagatcgag 240
 gtcacgtgcg ccgccgcgat gatcctcgtg gcgctttacg ttgcctacga gtcctcaac 300
 ccgcgctcct cgcaggcggc agcggcgggc gacgccgacg agctcctcgt gcgggggctg 360

<210> 295
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D4

<400> 295

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 tgtgctcaag acccgtgggt tagataagga atatgagggc aatgttgagg cactgggtga 180
 ggacttctct gttgagccag ctgatgagag gaggccttcc cgtgctctct tggatgttgg 240
 ccttattagg actacaactg ggaaccgtgt ctttggtgcc ctcaaggag ctttggatgg 300

tggcctggat attcctcaca gcgagaagag gtttgctggt ttcaagaagg atgacaagca 360
gctgg 365

<210> 296
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D5

<400> 296

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gaattctttc ttgtgattaa ggcctggcta atttctattc ttcaggtttg cagatcggcg 120
cagttttggt cgcaaaggcg tggtcggttct cctcgagcat cgatttaggg ttcttcggct 180
ttctatgata aggaggagtt gctggattat tttatcaggg aacagaatgg tgtgattcgt 240
tgattggatt acagtctgga tctctcttgc atcaaagggt tgagcaaggc aaaccacgaa 300
gcatcccgcac gaaggcgaag aaatcgccgt tcgtggaggt agagggtgac ga 352

<210> 297
<211> 356
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D7

<400> 297

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ccgcaaccga agcgcgcctt cgccgccgcc cccgcccccg ccgcctctgc gatccccgca 120
aggtcgcaaa catgtctacc gtgctccagc gcccgacccc cggcacggtc cagtgccttcg 180
gccgcaagaa gacggctgtg gccgtcgctt acaccaagcc ggggcgcggg ctgatcaagg 240
tgaacggcgt cccgattgag ctcatcaggc cggagatgct ccgcctcaag gccttcgagc 300
ccatcctgct ggcggggcgc tccaggttca aggacatcga catgaggatc cgcgtc 356

<210> 298
<211> 359
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-D8

<400> 298

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cagcagcagg cggcgccgag tagcggctcc ccatctcgag cttgccacca tggctagagg 120
attgaagaag catttgaaga ggctcaatgc cccaagcat tggatgctgg acaagcttgg 180
cggagctttt gtcccaagc catcttctgg acctcacaag tctagggagt gcctgccact 240
gatcctcatc atcaggaaca ggctcaagta tgctcttaca taccgtgagg tcatttccat 300
cctgatgcaa cgccatgtac ttgttgatgg caaggtcagg acagacaaga cctaccctg 359

<210> 299

<211> 254

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-E1

<400> 299

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cccagccatg cctcccatgc gcaagtcccc ggcgacgatt gccctgccg cgggggtcccc 120
gaggaagacg cggagcatgg ttgctgctgc tgctgcaggg aagcgggcaa cggagcctgc 180
tccggcgaag gcagtgccg ccaataagga agacgatgcg gcggttgccg agttgaaagg 240
gatgaagagg ggca 254

<210> 300

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-E2

<400> 300

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aactgcaag ttttgaaaac tgaactgtaa gatggcatca gcagagcttt cccgtgagga 120
aatgtgtac atggcgaagc tcgccgagca ggcagagagg tacgacgaaa tggttgagtt 180
catggagaag gtagcgaaaa ctgttgactc ggaggagctc actgtggagg agcgcaacct 240

cctgtctgtt gcatacaaga acgtcattgg agcccgccgt gcctcatggc gcatcatctc 300
 ctccatcgag cagaaggagg agggtcgagg caatgaggac cgtgtaacac tcatcaagga 360
 ctaccgtg 368

<210> 301
 <211> 356
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-E5

<400> 301

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 gctgctcggg aatccctcat cctccccacc tgtccgctcg tcagcgtcat gtccggcacc 180
 accccgaccc ctacacctac accgacgccg ctaccgccgc cgccgcccgc gccgccagcc 240
 gctcgccccg cacggtagca ctctctcaac tccaagccac cgcccaacta cgtcgcgggg 300
 ctcggccgtg gcgccaccgg cttcaccacc cgctcgata tcggaccggc ccgcgc 356

<210> 302
 <211> 359
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-E6

<400> 302

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 gtgaaggtag cgggcgcgga ggaagatggg gctcgcgctc gggaagctct tcagccgggt 120
 cttcgccaag aaggagatgc ggattcttat ggtcgggtctc gacgccgccg gtaaaaccac 180
 catcctctac aagctcaagc tcggcgagat cgtcacaacc atccccacca tcggtttcaa 240
 tgttgaaact gttgagtaca agaacattag cttcacggtc tgggatgtcg ggggtcagga 300
 caagatcaga cctctctgga ggcattactt ccagaacaca cagggtctta tctttgttg 359

<210> 303
 <211> 360

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-004-Q1-E1-E8
 <400> 303
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 tgttccggaa gtgcatggaa cctgtggaga agtgcttgcg cgacgccaag atggacaaga 120
 gcagcgtgca cgacgtcgtg ctcgtcgggtg gtcacacccg catccccaag gtgcagcagc 180
 tgctgcagga cttcttcaac ggaaaggaat tgtgcaagag catcaacccc gacgaggctg 240
 tggcgtagcg cgccgctgtc caggctgcca tcctcagcgg cgagggcaac gaaaaggtag 300
 aagatctgct cctgctcgac gtcacgccac tgtctctcgg cctggagact gcaggtggcg 360

<210> 304
 <211> 363
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB143-004-Q1-E1-F3
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 actagtgtgg tagctttgtt gattggagtg cgcaatggga ggctgtgctg gaaaggtagc 240
 tcgtgatgac gaagaaaagc ttgattttta aggggtggaat gttcatatta taacaagcaa 300
 tgagggctgg gaccagaaga ttgcagaagc aaacagagat gggaaaactg ttgttgcaaa 360
 ttt 363

<210> 305
 <211> 288
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB143-004-Q1-E1-F4
 <400> 305

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 cggtcatcgc acaggacagg acgcatagga agcctatggt tgtattgcat tggagtcggt 180
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 gtgtgatctg tctgtataaa agctgtggta aangtggnta atgttcat 288

<210> 306
 <211> 356
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-F7

<400> 306

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 atcaaggagg agttccccac cctctctat gccgatttct accagcttgc cggagttgtg 180
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 cagccgccac ctgagggcgc tcttctgat gccaccaagg gttctgacca cctgaggcaa 300
 gtctttggca agcagatggg tttgagtgat caggacattg ttgccctctc tgggtgg 356

<210> 307
 <211> 359
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-G1

<400> 307

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 tttcaggcct gcggctcgtg aacacctcat ctattttagc cacttttgcc accagcgacc 180
 accgatcgat cagctagcaa gccatctcgc tcgcgtcacg aggaaccac tggcggcgtc 240
 gcattgttgt cgctgtagct tgcattgtt ccctaacaac gggccttttc cccttccttt 300
 tccctcgtc cgctcctgc tctcgtgtg tataaaagcg cgctactatc gcgctcatg 359

<210> 308
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-004-Q1-E1-G11

 <400> 308

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 gcccatcat gatatgcgtc atgatctcca tgtaaactga taaggcgtcc cagttcacia 180
 tgcgatgccg aagtggttcg cacgaagacc cacctgcagc ttatgtcaaa tcaggtgcag 240
 aacaatatgc ctgtccatca ccaacaaggt aaacggatct atcagtctca gatgattgta 300
 tattagattg acgaagtctg atcctccggc tcgcagggtc gacttcccct tgacgcacac 360
 gcacactcag tagatcagtg ctgatcccaa tgcctccagt aaagtcac 409

<210> 309
 <211> 326
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-004-Q1-E1-G2

 <400> 309

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 atagtgaac taggtgctgt actatgatgt gctgtgctct gcacttacta tgaagtaaca 180
 tcaattcaca ggttcaagaa tttagtgtcg cgcagtgtga agaccctgtc atcaccatta 240
 tggcgcaactt cgacctcgtc ttcgacgcag acgtacacca gcctcaggtc catgtccatg 300
 atcacacggc gagacacgag caccac 326

<210> 310
 <211> 353
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-004-Q1-E1-G3

<400> 310

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gcgccgagta cagcgaggcc gtcgagaagg ccaggcgcaa gtcgcgcgcc ctcatcgccg 180
agaagagctg cgcgccccctc atgctccgcc tcgctggca ctccgcgggg acgttcgacg 240
tgtcgtcgag gaccggcggt cccttcggta ctatgaagtg cccggcgga ctggctcacg 300
gcgccaacgc ggggctggac atcgcggtgc ggctgctga gcccatcaag gag 353

<210> 311

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-G5

<400> 311

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cgaaaatgat gatgatgatg ggagagagag cgcacgcgcc tccgtggcag cactcgccgg 180
cggccagcgg cgtcacggac gcggacgacg cgtctccgta cgccctccta gcggcgcttc 240
agcattacct gccgtcgaac gaggtggcgg cgtacgacga agacgacgag gaggcggccc 300
tggcgggcggc gaccgcccgc gtcgacgcgt acgcctgcga cgagttccgg atgtacgag 359

<210> 312

<211> 273

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-G7

<400> 312

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tgccccggta gtttggttgt agaatgcttg tataactgaa gatcccgctg gctatgtgct 180
tgcttgtgta cagtgtctctg ttctcgta atacaatatt gggagggaat actaggcgctc 240

tgtacgtagg cttggatgga aataatatcc ggt

273

<210> 313

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-G8

<400> 313

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tcgccctggc gcagctctga cgaagatacg tcgcagcgcc gttctcgtca ccgtcgtgct 180

ccactcggcc tcagcttggg ctgtctccgc gtttcacctc ggaagggacg aaagcggctc 240

cgtgaagggt gtgcgtccgg cgctctgcta gcgggccaaa gctgtgtatg ccgctcgtcg 300

cgcagtcacg cactacattc agaaccacgg cagccgcttt ggaatttatc aaggtgct 358

<210> 314

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H1

<400> 314

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caccagggga gaaagaggcc aaaagggagg ggagagtgtc gtcattggctt ccattgtcgc 120

ttccaggagg gccgttctc tagttcgcgc tctggagaag ctcatcgcag cgtcctccgc 180

tccccgggact ggctccgccc tcaggccggt ggcagtcgcc ggcggcctcc gcggctacaa 240

caccggcgct ccgtccgac gctacgaagg ggcgagtcg gaagacgata gcgtccgcga 300

gtacgatggg cggcactgcg gccgggacta cgctgtgccc agcctgttct catgtagtcg 360

tcatct 366

<210> 315

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H2

<400> 315

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acaccgagga gctgcttgca gcccaccggc agctgtggtg ccatgccctg ggctacgtca 120
agtccatggc gctcaagtgc gccctggacc tgcgcacccc cgacaccatc gaccgctgcg 180
gcgggagcgc caccctgggc gagctgctcg ccgccagcga gatcccggcg tccaaccacg 240
actacctccg gcgggtcatg cgcacgctga cagccatgcg catcttcgcg gccagccacg 300
accccgccaa ggccgacgac gcggccgctc tagagga 337

<210> 316

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H3

<400> 316

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ttccgtgggc aggcgagct cccgcgttc gccgcgccgc gccgtacga cctgcgcctg 120
cgccccgacc tcgtcacctg cacattctcg ggcactgctg ccgtcacctg cgctgtctcc 180
gcgccaaccc gcttctctgt cctcaactct gctgacctct caatcgacag cgctccatc 240
cgtttccggg atttggcgcc taaggaggtg gtgtttttcg cggacgacga gatcctggtg 300
ctcggattct ccaaggacct ggtgctcggg gagggcgtgc tcagtatgaa 350

<210> 317

<211> 308

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H4

<400> 317

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accgccccgc ttcttccgc cttgctccgt tgcttctcc caccacagtc cactccactc 120
gccggccctg cagctcagta ttgactgag actggtggtg gagctgctag cagcgagcct 180

gctacttcct ggtcctgacg gtgcgttcag acctcagacc agtgccgacg acgagctgtg 240
aggagagggc aaggaaacaa gcctgtgagg aaggcggcga tggagaggta cgacgtgatc 300
aaggacat 308

<210> 318
<211> 359
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H5

<400> 318

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cgtccgtagc agaccaggaa cgcccaaggc gctagcgtct ccaagatggt gctgcaaaac 120
gacattgact tactcaatcc accggcagag cttgagaagc taaagcacia gaagaagcgg 180
ctagtccagt cccccaactc cttcttcatt gatgtcaagt gccagggctg tttcagcata 240
accactgtgt tcagccactc ccagactgtg gttgtgtgcc caggctgcca aactgttctg 300
tgccaaccta ccggtgggaa ggccaggctc accgaggggt gtccttccg tcgcaaggg 359

<210> 319
<211> 155
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H7

<400> 319

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acttggattg tatctgggag ctaacatgaa cactatggat tgcagttgca gtcacttgga 120
gcaaccatga gttgatgggt atcatctgca tcaca 155

<210> 320
<211> 135
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-004-Q1-E1-H8

<400> 320

ttccccggacc gacccacgcg tccaggggtct cgtcggggctg tgggcttgtg tcttggctct 60
 tgggcttgtcg ctcggttctg tcttccgcgc tctcggttgc gtttgcgggc tgtttgtggc 120
 gcttggcttt gttgg 135

<210> 321
 <211> 432
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B10

<400> 321

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 tcaaggacgt gccggggaac gagaacgacc ttcacctcca cgaactcgcc cgcttcgccg 180
 tcgatgagca caacacgaag gccaatgctc ttctgggggtt cgagaagctt gtgaacgcca 240
 agacacaagt ggttgctggc accatgtact atctcactat tgaagtgaat gatggccaag 300
 tgaagaagct ctacgaagct aacgtctggg acaagccatg ggagaacttc aatgagctgc 360
 aggaattcaa gcctgttgaa gacgggtgta gcgcctaacg atctctcctt ctccatgtgc 420
 cagcctgagg ct 432

<210> 322
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B12

<400> 322

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 gagggccac tcaagggat tatgggctac gtggaggagg atctggtttc caccgacttc 120
 accggtgaca gcaggtcgag catcttcgac gccaaaggccg ggattgccct gaacgaccac 180
 ttcataaagc tcgtctcttg gtacgacaac gagtggggct acagcaaccg cgtcgtcgac 240
 ctgatccgcc acatgttcaa gaccagtag agagagatat ttctgcctcc ctatcgaggg 300
 tcgtccccga tggcctttgg tcgcagacca tctttgctgc ttgtctatgc tgagaataaa 360

tgtgaacggt gcccctggac gctggattca tgctggtttt gg

402

<210> 323
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B2

<400> 323

acgcgtccgc aacctcacac cacaaacgct catccagtgc tcttttcttc tagccgccgc 60
cgcaaacgcg tgccaacgct ctgcgctccc atcctcccg tcttgaagg tccttctcaa 120
catggcctcc aagacggata agttccgct ccaggcggag atcaacaagc tgctatcgcg 180
catcatcaac agcttctact caacaatgag atcttctta aggagctcat ttcacactcc 240
tctgatggca tggataatat caggttcgac agtttgacgg acatgagcaa gctggatgcc 300
gacccggagc tgttcatcta catcgtctct gacaagagca acaatattct gacaatcatt 360
gacattggca ttggtatgac 380

<210> 324
<211> 310
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-B5

<400> 324

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agttagatct agggactggg tgatcatgcc agccattctc gccctgttcg acacggccgt 120
atcgatcttc ctctatctga cgctggtgct agactcactc gcagtcgcag tcggctatgc 180
gactgtcgga cgggcacaca acttatgcac ggtgtgcagc catcaatcgc gtcgacgagg 240
ctacagcagc gttagcgagg acaccagtgg acatcgtgca agagccactt gcgattacac 300
ctgtcatgct 310

<210> 325
<211> 439
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB143-005-Q1-E1-B7

<400> 325

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acggccatga ctgcagctct gtggccgagt ccatgctcta cggccacatg agctacggcc 120
gtggaggtga ccctaattggc gcgccacaag ctttccagct caacccaat gttccactcc 180
tcaccaacgg gcagatggtg gatgacatcc caccggagca gcacgcgtg gtgccttctt 240
tcatgggtgg tgggggaaag aggatacatc cccttcctta tgcggatccc agcttacctg 300
tgcaaccag gtctatggac ccatccaagg atcttgctgc atatgggtat ggtagtggtg 360
cttggangga acggatggag aattggaagc agagacaaga gaggatgcac cagacgggga 420
atgattgtgg tggatga 439

<210> 326

<211> 141

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-C11

<400> 326

acgcatccgt aatttttttt tttttttttt ttgtattgtt tatttttctt tttttttttt 60
tttttttttt tttttttttt tttttttttt tttttttttt tttttttaa gttcaaaatc 120
gcgggaggcc gccctagagg a 141

<210> 327

<211> 177

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB143-005-Q1-E1-C4

<400> 327

cacgcgtccg ccacgcatcc gccacgcgt ccgcncacgc gtccgcattg ttgtaaattg 60
tagtatatag gagtggatc gtcattgata aactgtgtcc tttgttcag agtgacacc 120
tctactgtat actgcacacg aaccaccgc tgccggcg cgcctctaga ggatcac 177

<210> 328
 <211> 81
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-C5

 <400> 328

 ttccccggggc caccacgcg tccgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

 aaaaaaaaaa aaaaaaaCaa a 81

<210> 329
 <211> 212
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-C6

 <400> 329

 acgcgaccgc aaacgcgtac ggcacgctt ccgcctccgc atctgcagta aattataata 60

 tcttgcgagt gggaacatcc ggggtggccgc gctagaggat caaaccttat ctacgcttac 120

 agtggtcggt cagtactctt cgataatgcc acggagcttc tgttcacagg gtttcgtttt 180

 acgctatcgt tacggggagc acgttctctt tc 212

<210> 330
 <211> 456
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-C7

 <400> 330

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 cagattaaat gatcttgatc tgcagctaag gaaggagaaa gaggaatgcc acaggatgac 120

 ctcaaaaatt aaaaagttcc ttaaagccca tgctcgcttt ttgaaagcac aggaagaatt 180

 gaaaagggtca caagctcggt ttgagagact cggtgattta cttgcttcag atattctgaa 240

 acgtggtgct aatgaagaag tttctagtat caatgttgat gaagatccaa atgttcctta 300

 tgaaaggagc ccaaatgctg ctatagctaa gaagagatca ataccatact caacaagtga 360

agaagcgaaa gccgtgaaga aaagaagaga gcgggactct gacacaacta ggccagataa 420
 atataggttt gaaggtacta ttgcaggatt tgaaaa 456

<210> 331
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-D12

<400> 331

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 ccacaatggg tatctcgcgt gactcgatgc acaagcgccg agccaccggt ggaaagcaga 120
 aggcctggag gaagaagcga aagtatgagc ttggtcgccca gccagccaac accaagttgt 180
 caagcaataa gacagtgagg agggtcctgt ttcgtggagg taatgtgaaa tggagggctc 240
 ttgccttga tactggtaac tactcatggg gaagtgaagc tgttaccgcg aagaccgta 300
 tcctcgacgt ggtctacaat gcatcaaaca atgagcttgt gaggacacaa acccttgtga 360
 agagtgccat tgtgcaagtt gatgctgcc cattcaagca gtggtacctc actcacta 418

<210> 332
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-005-Q1-E1-D5

<400> 332

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 ccgctttttc gggagattac tttctatact ctccatttcg attttgagtc gggtcggtat 180
 ctcccttgt tgattagttc cgctgctttg cgctccgtg ctcgcagata ccttgggctg 240
 tttgcctct gcgcgacgac gtgaggcggg agcgtgacga gtttggtttg gctgggctgt 300
 tcggtttgcg gtttagtctt cctgcgattc tagttttcgt gtggatcctg tttcgtcctc 360
 gacttctcag tgtgtggatt gcaggtttgg gtacgatccg gtattgggaa ttcgtcgtgg 420
 cgtcgggtgg cgaggagttg g 441

<210> 333
 <211> 452
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-E11

 <400> 333

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 ggagggcgcc gtccgcccc gcctccggga gcgatgatga tcgcgcgacg cctgctccga 120
 cccaatgccc ccgcccaggc aaccagctta ttgaagcatg taactggcac cgcaagtttg 180
 caaggcaatg cggatagctt gttggatggt acagtcagac attttggtc agcaccgtct 240
 gccagcctg aagaaaatgg gttcaagggc cacggcatgc tggcgcttt tacagctggc 300
 tggcagagca atgatttgca cctctgac attgagagat ctgagggttc ctatgtctat 360
 gacattaatg ggaacaagta tctggactct cttgcaggat tatgggtgcac agctttaggt 420
 ggtagcgagc ctcgattact caaagcagct ac 452

<210> 334
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-005-Q1-E1-E5

 <400> 334

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 gccctttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 120
 tttttttttt tttttttttg gttttttttt ttttttggtta agggcaaaaa gggtttcccg 180
 gttgacctc ccgggggttt gcaattgtcc ctcccagag ttcaacaaac ccgcatttta 240
 ttacgtaggc caccctgtcc cagcataggc acgattaaat gtcccttacc aggctgttca 300
 cgttgcgctt ttcagggggg tacacgtcca taattttgt ggggcattcg tccttaattc 360
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 cgtgcatgtc ttcaaaggtt 440

<210> 335

<211> 336
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-001-Q1-E1-A1

 <400> 335

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 cttcactccg gcattccatc catatccatc catcagaatt ctcagtctcc acagcagcaa 120
 ggcgacacgac cagcaccagc agccggcaac aaaagacaca gcagcgatgg cgttcgtgcc 180
 ggtgtgcgtg cagtgcggga cgcgagcaa cccgtgccgg tgcaagggtg tggggccgac 240
 gctgggggttc gtcgcgttcg tgggtggccg ggtcatcgaa tggccgctgg gggccgcccgt 300
 gtacctgttc cgccaccgca agggacgacg catcat 336

<210> 336
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-001-Q1-E1-A10

 <400> 336

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 atcgatcact gaagtagtaa tggcctccgc caacagctgg accctcgaga tcgcgtcgcc 120
 ggtggccccg cagcgctgt tccgcgccgc cgtgatggac tggcacaccc tggcgcccaa 180
 ggtcgctcc cagtcgtcg ccagcgcgca gcccgaggag ggcgacggcg gcgttggcag 240
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 gttcctcgac gcggacaagt gcgagtcaa gaacacgctc atcgaggag gcgggatccg 360
 cgtcgccatc caaacggga acttgcaaaa tcagggtggg accccgcggc cgcgggcg 418

<210> 337
 <211> 424
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB143-001-Q1-E1-A12

 <400> 337

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attcaatcat tacaatgatg catttggcca ccgaatcaac aaggatctga aggctgaccc 120
ccaggacgag tacctcagaa cgctgcgggc gatcatccgg tgcttcagtt gccctgacag 180
gtactttgag aaggtggcta ggcaggccat agcggggcta ggcacagatg agaactccct 240
gaccagggtc atcaccaccc gcgctgaggt ggacctcaaa ctgattaagg aggcgtacca 300
gaagaggaac agcgtgccgc tggagcgggc cgtcgcgggg gacacctccg gcgactacga 360
aaacaagctc ctgcgcgtcc ttggggcagg attgatgagc cgtactggtg cgctggtgcc 420
tttc 424

<210> 338

<211> 326

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-A2

<400> 338

acgccggcat gtaccggtct agaattcccg agtcgaccca cgcgtccacc cacgcgtccg 60
tgctctgctc catagaagat gaatgaagag agagatggtg aagaaggctt tggcaaatgg 120
caattgccgc agcaagccat gtcggcgcca ctgaccggt tagtgattgg tataatttgg 180
tgtggcagca gccaggatta atgcgctggt cttttatctt tactactagt ttggtctcgt 240
ccggtatctt atttttcttt ccccttttcg agtctgtact gaaactgctg agagatttgc 300
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<210> 339

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-A4

<400> 339

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aagcgcgcgg tatgcaaaca aggatggatt cgagtacca cggcgaccgc caagggtccga 120
gagcctgtga agaattgcca ggcaagatgg ataacgaccg tgccgatcgt caacgcttga 180

aagcctgcga attcccagcc aagatggaca acaaccatgc cgatcgtcaa gtttcgaaag 240
 cctgcgaatc gaaaggcaat gcctgtgaat tgccaggcaa gatggataat gaccaccccg 300
 tccgtcaagg tttgaaagcc cgtggactac tgcaacctaa gtcggatgcc agtggaggtg 360
 gc 362

<210> 340
 <211> 51
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-A5

<400> 340

tactgggtcaa gcattcccgg gcccaaccac gcgtcaggcc gctctagagg a 51

<210> 341
 <211> 351
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-A8

<400> 341

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 acacgaacgt gtacagccag ggggaagggcg ggcgggagca gcagttccgg atgtgggttcg 120
 accccacggc ggccttccac gcctactccg tgctgtggaa ccccgccac gtcgtcttct 180
 acgtggacgg cgtccccatc cgggagttcc ggcgccgagg cgacgggacc gtgccgttcc 240
 cgacgtcgca gccgatgcgg gtgtacgcca gcgtgtggga cgcgaggag tgggccacgc 300
 agggggggcg cgtccggacc gactggtcca gagcgccctt cgtcgcgtcg t 351

<210> 342
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B1

<400> 342

cgctgcgatg taccgggcca gaattcccgg atcgaccac gcgtccgagg acgcgtgggc 60

ggacgcgtgg gaggagctca cggtcgagga ttttctttat gatgatgatt acaagataga 120
tctttctggg tctaactctgg atgtcattaa taacctagaa gggattgttc agctggaata 180
tccagatcac aatttgccgc aagggttagc ccctaata gca taccttgaca tgaatagttg 240
tgggcagagt gccggggctg ttttcttgca catgccagat ttgctcacia caatgacttc 300
agcaccttct gcattcctga agccaaaatg cgctctctgg gactgcccc a ggctgctat 360
tggatcagaa agatggcata attattgcag catgtatc 398

<210> 343
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B10

<400> 343
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tagcgaggac gaggccgccc cgctccgag atacagcggc cgcacgagc tcgcgccaga 120
ggtttacagg atggacaaga tcaaggcggg gatgaagaac ggcgtgctca aggtgggtcgt 180
gccgaagggtg aaggagcagc agcgcgaagga cgtgttccaa gtcaacgtcg agtagatggt 240
tccaaataga agcaagtgcc ggtacgggat ggaggattgg aggggcactg ccaaactagg 300
attcctctct ctcaatctga tctggattct ggaatcagat ttctcttctt tcaattttct 360
ccgtcaacct ccaacaatta tgaattaagc aacgtcgctt cagttttcgt gtcaaggccg 420
gtgga 425

<210> 344
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B11

<400> 344
ggtaacggtc tagaattccc gggccgaccc acgcgtcagg tcactattgc tgtgaaaggg 60
cagagccttc cttctggtga aagcaaggat gatagtgccg tgctgatag agcacagttc 120
aatagagacg atttcctgt tcaagtatgat gctgcaaagt tctttgtcat taaatcgtac 180

agtgaggatg acatccacaa gagtgtaaaa tacaatgtgt gggcaagcac aaccaatgga 240
aacaagaagc tcgatgctgc ttatcaagaa gctcagtcga agggttctgc gtgccctata 300
ttcttgTTTT tttcagtga tacaagtggg cagtttggtg gtgttgctga aatgacaggg 360
gctgtcgatt ttgagaaaac cctgggggat tgggaacaag accagttgaa atggttcctt 420
ctctgttaag tggcacattg tcaaggacgt gcc 453

<210> 345
<211> 142
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B12

<400> 345

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ctgtgtaacg tgctcgcggg catgtccgtc tcgtgccgga attaataatt atatgcatgt 120
atttgtgttt ttctgcgtta aa 142

<210> 346
<211> 379
<212> DNA
<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B3

<400> 346

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catggacaaa aagaacaaca ttcgtaatat gtctgttatt gctcatgtgg accatggcaa 180
gtctacactt acagattccc ttgtggcagc tgctgggatt attgcccagg aagttgctgg 240
tgatgttcgc atgactgata ctctgtcaga tgaagccgag cgtggcatca caatcaaatt 300
tactgggtatc tctctttatt atgagatgac tgatgagtca ctgaagaact acaagggtga 360
gagggatggg aaccaatac 379

<210> 347
<211> 371
<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B4

<400> 347

ccacgcgtcc ggcgattcga gttaaaaaag aacatacaca atcatatcac caggccaggg 60

cacgcacaag cgagctgata tgcagcatta tttggctgat tttttaatca ttgacggcgg 120

gcgaacatat ggcggatgac tcgttcgacc tccccagcgc tagcgaggag gaggtgatgg 180

gaggcctgga tgaggacgag gccatgaagg acctcgagac cgggatggac gatgaggact 240

atttgccacc gacgatgaag gttggggagg agaaggagat cgggaacgag gggctcaaga 300

agaagcttgt caaggagggc gaggggtggg atcgccccga gcttggagac gaggtggaag 360

tgcattacac t 371

<210> 348

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B6

<400> 348

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tcttataagc tactactagt tacaagctgg tttatatatta actacaagta gcaacgattt 120

gtcttagtat atatggttca taatacatat atattggaac tgagataata tatgcaggag 180

tacagtgttg atccatggac tcggaaggag ttgtagcagc aaaggtggca gatgagacta 240

ctaaaccggc aatccaagaa gacggcgccg agagcaaggc cgggatgact gatctgctga 300

tgctgaccga caagtcgcag ctgcaggcgc tggcgatgct gctgcggaac aacgaggagc 360

tcatgatgag ccaggcg 377

<210> 349

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B7

<400> 349

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aaaagcacac catcgtcatt gacggcggat actacggcgg tcgcatcag cgctacagcg 120
gcggttacta cggcggcggg ggcattcgaa cgccggggta cgctccggcg gtcccgtacg 180
ggatgtcgca ggtgaacatc gagggcaacg ggtgcggggc ggcgctgccg ccgcagccga 240
ccgtgaaggt gtactgccgc gccaaaccca actacccat gagcgctccg gacgggaagg 300
tggtgctggc gccggcgaac cccaaggacg agtaccagca ctggatcaag gacatgcggt 360
ggagcacgag catc 374

<210> 350

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB143-001-Q1-E1-B9

<400> 350

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ataccctgac cggacccccga tcccgcggc gtcgcgcgga atcgcgggcg tcaaagccta 120
tacgccaccc cacctcaagt cgcgcccggt cgccgcgggt tccgcgtgct agtgctctcg 180
ggagctcgga tcagaggggc gggctagggt tcgccaatcg ccagcgtggg tgctgccgtc 240
gggcgcggc ggctgagtag tacgaggaga gatggacgcg ttctgcaca ggctcaagcg 300
gctggacgcg taccccaagg tgaacgaaga tttctacaag cggacgtctt ccggaggcat 360
cgtcacgcgtc gtcgccgcg tcgttatgct gctctctca tctccgagac aagtcatt 420
tttattcgtc aacagagact a 441

<210> 351

<211> 451

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-056-Q1-E1-E4

<400> 351

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taccctgagc aaatcccttc ctggcttggt gactggattc ctgagaaagg aggttacctt 120

atanggaatc tgcagccagc tcacatggat tttaggttct tctctcttgg caacctttgg 180
 gccatagctt cgtctctaac tactccaaaa caagctgagg gaattcttag ccttattgaa 240
 gaaaaatggg atgatcttgt agcaaacatg cccctgaaga tatgcttccc tgcaatggaa 300
 gatgatgaat ggcgcattat tactggcagt gatcctaaaa ataccccatg gtcatatcat 360
 aatggtggat cttggccaac cttattgtgg cagttcacat tggcctgcat aaaaatgggc 420
 agaccagaat tggcccgag agccattgct g 451

<210> 352
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-E7

<400> 352

ggtccgaaat tcccgggtcc acccacgcgt ccgaccacgc gtccgccacg cgtccgaaac 60
 tatggggcaa gccttccac ggcttgcct cctcgccctc gtggcggttg tgtctgccgg 120
 cctcttcccg caagcgtag ggaacggcaa gggcaagggtg catggcgggcg gtgccgtcaa 180
 cccgctggtt gccggcatct gctctcgcg cccattccca gaggtttgca cggccacagc 240
 cgggcgccat gcattcaagt acccggtcat cgaccatttg gccgtgctga acatgcagg 300
 ggccgcattc gccaaagcga cagcgcaggc gcggaagcac gtcgcggttg cgccccgcac 360
 tattccaccg ccgcaggcac aggccctcag aacctgcgac acgatgtaca tgaacacgca 420
 ggacgccatc ggcgc 435

<210> 353
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-E8

<400> 353

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 gccttccac ggcttgcct cctcgccctc gtggcggttg tgtcgccgg cctcttcccg 120
 caggcgtag ggaacggcaa gggcaagggtg catggcgggcg gtgccgtcaa cccgctggat 180

gccggcatct gctctcgcg cccattccca gacgtttgca cggccacagc cgggcgccat 240
 gcatccaagt acccggtcat cgaccatttg gccgtgctga acatgcaagt ggccgcgttc 300
 gccaaagcgca cagcgcatgc gcggaagcac gtcgcggtgg cgggccgcac tagtcgagcg 360
 ccgcagggac aggcctcag aacctgcgac acgatgtaca tgaacacgca ggacgccatc 420
 ggcgcgggcg 430

<210> 354
 <211> 472
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-056-Q1-E1-F1

<400> 354
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 catgaccgac atgggtcaagt tcctgcacga ccacggcgcg cccttcgtcg tcaacatcta 120
 ccccttcctc agcctgtacc agagcgacaa cttccccttc gagttcgctt tcttcgacgg 180
 cggcaagaac atccaggaca agggcggcgt cacctactcc aatgtgttcg acgccaacta 240
 cgacacgctc gtgcacgcgc tgaagaaggc cggcgtgccc gacctcaagg tcatcgtcgg 300
 cgaggccggc tggcctaccg atggcaacaa gtacgccaac ttcaagctgg cgcggcggtt 360
 ctacgacggg ctctcagga agctggccaa gaacgaaggc accccggtcc ggaagggcaa 420
 gatggaggtc tacctgttcg gcctattcga cgaggacatg aagagcatcg cg 472

<210> 355
 <211> 367
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-F10

<400> 355
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 ggctgccatg ctacgggtgg ccgctgatgt cgccaacgcc ggccaagcga atcctgtgac 120
 gcctgctggg cgcgtggtac acgatcatca cgtaagtgc acaggcgggc cgtggaaaca 180

ttcggacgcg accttctact gctggcggga caggtccggc acctctgcgg gcgcgtgcgg 240
 gtaaagcgac acgtacgcgc aggggtacgg tgtgcaaacg gtggccgtga gcacggtgtt 300
 gtttggcgac aggacggcct gccgccggtg ctacgaagtg cggtgcggtgc acagctccag 360
 cgggtgc 367

<210> 356
 <211> 256
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-F12

<400> 356

tcgcgagtcg atacacgcct ctagcatgta tcgtgaaagc gacgaggctg gccttggcag 60
 cggcgtttgt tctgtgcttg cttctggcga ccgggccgca ggaggccgcc ggcgccgagg 120
 ggatgctgtc gtatgataag ttgctcagct gcaagggtgt gggcaactgc gacaagaaca 180
 ggggccccgg ggccaccgc cccgggaagc ccgtaaaca gtacaccgc ggctgcagcc 240
 cgctgaccgc gtgccg 256

<210> 357
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-F2

<400> 357

cgaccacgc ctccgctacc ctgcagtcg tctcactcac cccgccttca cgcctccctc 60
 accaaataag gtcccgccct tttccgacat tcacaggggg gacaggaaat cagcggccat 120
 ggctcgatt ccggcgacga ccttcgccgt catcttatcc gtctcttct gtgccgcggc 180
 tggcaccgcc gtcgacaacg acctccccga ctacgtcatc cagggccgcg tctattgcga 240
 cacctgccgc gccgggttcg tgaccaatgt caccgagtac atcgcgggcg ccaagggtgag 300
 gctggagtgc aagcacttcg gcaccggcaa gctcgagcgc tccatcgacg gggtgaccga 360
 cgggaacggc acgtacacga tcgagctcaa ggacagccac gaggaggaca tctgcgaggt 420
 ggtcttggtg gagagccgc gcaaggactg 450

<210> 358
 <211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-F6

 <400> 358

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 gaggcggcgg cggcggctac cgcggtgccg cctgcagggtg ccaagacctc cagcagcaac 120
 gatgcccgcg acgggcgcat gggcagcgtg caggacgagc cgcggcagca gcgccacgat 180
 gactatcacc accccgagat cgtccccgag aagatcatac acgaggacgc gttgccggtc 240
 gttgctgcgg agaaggagac tgccgccgcc gccgcaacct cgaaggagga ggaggagggtg 300
 gagtcgcccc agaaaggagc ggctctgtcg ccggtgccgg aggctatcgt catcgccaca 360
 gccgcaacct cgaaggagga ggaggaggag gtggagtcgc ccaagaaaga agcggctctg 420
 tcgccggcgc cggagcctat cg 442

<210> 359
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-F7

 <400> 359

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 tccaagatct tcaacgacga gtccttcgca aagatgaaga ctggtgtccg gatcatcaac 120
 gtggccaggg gtggagtgat cgacgaagac gctctggtca gggcgcttga ctccggcaaa 180
 gttgcccagg cggctcttga tgtcttcacc gtggagcccc cgccaagga cagcaagctg 240
 gtgttgcatg agaatgtcac tgtaacaccc caccttgag caagcactgt cgaggctcag 300
 gaaggcgtcg ctatcgagat tcggaagcc gtggttggtg cgctgagagg ggagctcgca 360
 gcaaccgctg tgaatgcgcc catggtecca gctgagatcc ggtcagagct ggctccatat 420
 gtttctctgg ccg 433

<210> 360

<211> 159
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-F8

<400> 360

gaccaacgcg tccacgaaaa ggaaagctct ctcattgcc aattgcccc gactcaagcg 60
cccggcgcgc ccggcggttg tggaatcgat tgaaccggc atcccggaga atctaaggac 120
gttggtttca cctcacgttt ttgtgcatgg aatatgagg 159

<210> 361
<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-G1

<400> 361

cccacgcctc cgcacacgcg tcagtatgtt cctggcatt gctgacagga tgagcaagga 60
aatcaccgcc ctggctccta gcagcatgaa gatcaagggtg gttgctcctc cagaaaggaa 120
gtacagtgtc tggattggag gatccatcct ggcatcgctc agcaccttcc agcagatgtg 180
gattgccaag gctgagtacg acgagtctgg ccggtccatc gtgcacagga aatgcttcta 240
attctttggg cccaagagat gcaaagccga gaggagccat tatcgccagc ctcccgcctc 300
gtttctttct ccttttggtg ctgtttcttc attagcatga acaaagtttt ctgccggtct 360
gtcggcagcc gctttctcct attcatcaag actgtaatgt ctattgttgc tacctaatgc 420
ttctcacttg tcattttgga caca 444

<210> 362
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-G10

<400> 362

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atcttccagt gcccagagat cttcgtgagg cctgaccggc ggacggagat ccgcggtctc 120

atcaccgcgc aggtgcgga ggaggaggac agcagcggct tcgtcttcct caagggaag 180
 gtgtacggcg tcggggaggt gtacctgggc cgcgtcaccg cgccggactc gcgcgtcatc 240
 ttcccgaca cctacctctc caagaccatc caccggccg gctggacaac catacgctac 300
 agcggcagca ccgacaaggt gacgctcgcc gagttcaact gcactgggccc gggcgctgac 360
 gtgacgaacc gcgtgccatg gtcgcagagg ttctctcgcg acgacgcggc caagtacctc 420
 accatcgact tcataag 438

<210> 363
 <211> 298
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-G11

<400> 363

cgcgtagac gttacaacac cctaaagtga gtcgtattaa ccgcggctac ggccattcca 60
 tcttcgagtg ccccgcgatc gtcgctgagg cgtgaccggc agacagacat ccgcggcgcc 120
 atcaacgagc aggtgcgga ggaagatgac agcatcggcg tcgccgtcct caagggaat 180
 gtataatgtg tcgaggaagt atagccgtga ctgctcacag cgccggacgc gcacgtcatc 240
 atcgctgtga ccggagtctc cagcacgacg cagacggccg gcggggcagc gatacgcc 298

<210> 364
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-G3

<400> 364

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 tccaaggttt tgcaagacaa gcgtgtgtgt gagagagaga cctgcattgt ttggtcgcca 120
 ctactaccat gcgcgatggc cgcgtcgctg tcctcggcgc tgagctccat ggaggtgatg 180
 ctggacgcgc tcatgcagcg agggataggc aagccggaag aagccagcag caagccaaa 240
 gaagaggagc cgccaccggc gctgcccagc cgcccgacgg ggcgaggcag actcccggcg 300
 ctgcataggc ccggcggcac agcagcggct ccgtggatcc accggccatc cccggtaccg 360

cagccaacgc aggaagacga tcaggagaca tgtctggtcg gtcaggagct ggaaagacgg 420
gcgggc 426

<210> 365
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-G5

<400> 365

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catgctcacg gaggtgtcca ggccgcctta catcccgccg ccggccgacg aggacctcg 120
ggacgtcgaa gggttcgacg tgaggggcca cttcaaggac cttcaccagc cgccgcctcc 180
caagtccgag tcggagtcgt cctcgctccga gttctcgacg gagttctgac tgtgagctcg 240
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gggtgtctgt actgtacata catggagacg gggatggtgc tgtaaattcg acgtagagtt 360
ggtgtggttg tgcaaacatt ttgggaagcg cgagggctcg ccggcgact gtgctcgagg 420
cattttcttc gtgt 434

<210> 366
<211> 464
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-G7

<400> 366

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cagatctgag gttgtcacac atcgcatcga ggttgccggc cgcgagcag tgttcagcct 120
gttcagattc ttgaggaaag cgagacgaag gatggcacgt gtttcagga ggctgtccta 180
tgtcgtgttt ctctctctca gtctcagcag acagtgggaa ccgatcgatg ccatcaatgg 240
gagtagccat gcccatgcat gccttgataa tgggtaaagc gacacagcag gaggacggtg 300
aagaatgagg agaggtgcac ggataaggaa gagagtcaat gcttatcgcc gagtctccag 360
ttcaagggct tctgctgtaa tagcgataga tgcgccgagg tgtgcatgaa gtgagagctt 420

tcgcggtggc gaggcagggc gggacgtggg catgcacagg tgct

464

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<211> 442

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-056-Q1-E1-G8

<400> 367

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ggcgatgctt ctcatcacgc tcgtgctgga ggccgcccct ccggcgaccg ccatggactg 120

caaggccggg tgtgacgagg tcacggggcc actccacatg agcatggagg actgcatgaa 180

gaggtgcaag gagatcgctg ctaagcaggg gcctagggac cttacaagg ataacaaact 240

tgacatccca tgaactagtt aatgtccta tatcatctgc ctatccatgc atgcattgca 300

ttgcgtatgc aactgtgcg tgccctgcca caaagttcga caacacaccg atctcgatgg 360

atttgtaatc gtgtccactc gatcgagaga tcgatcgatg cttgttanta tattttgtatt 420

ccacattata tataagaaat ac 442

<210> 368

<211> 477

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-H1

<400> 368

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ccttcttgag agcaaaaagg tctcaaagtc tcttgagagt gacttttagca ataaaatgaa 120

ccagctgttg ctaatagttc tgcaaaaaca aaggcaacaa cagatgatgg atggttttgg 180

aggatactat gatgaatgca tgtactggag acaaaatgat gaaattcatg atgctcataa 240

ggaggcatct gtcctatgtt catcagctcc tgtctcacat cttggtgctc atcagcaaga 300

gtgttggcag cactcttcat atggaagtca acatcacgat aacaaaaatt tacttgaaat 360

ggaagtcagg gtaaggggtg aaatgtcca gattcaacat gaaatatatg aactgcagaa 420

gttgggtgaa agttgtattg catcccaagt aaagatgcag cactccatta aagaaga 477

<210> 369
 <211> 196
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-H3

<400> 369

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 tcgatcgtaa caatgcaaag ttgtgttgta tataactctt gtgtttggaa tgccgcccgt 120
 aagtaatggt caactctaac actgcttgcc aaaaagaaaa agaaaggaga aaaaaaaagg 180
 gggccgctct agagga 196

<210> 370
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-H5

<400> 370

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 catcttgcta ataagcctgc gtgcccttcg ttcttctcgc tctcgatccc gacgacgctc 120
 cgttcggctc cggcaaacca catcaagtcg cgatggagat gaagaaggtc gcctgcgccg 180
 tcctcgccgc cgccgcctcc gccaccgtgg tcctcgccgc cgaggccccc gcgccccccc 240
 ccaccagcgc ctctcgggcc gcgttcccgg ccgtcggcgc cgtgctgggc gcctccgtgc 300
 tctccttctt cgctactac ctgcagtaaa attaaaggag gatcggaggg agaggctgct 360
 ggctgcgatt gcctgtattc ggttggattc ggtttatata tatatttaag tacttttagtt 420
 tgggtctgaa catgtcgatt ga 442

<210> 371
 <211> 462
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-H7

<400> 371

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 gacaaaacat ggatgtgaat gtgagaacca tgtggtcgtc gatgcgggca caggttgcca 120
 tggctgtggt gttggtgttc ttggtgagcg gcgcatgggt cggtcctccc aaagtcccc 180
 caggcaagaa catcacggcc acctatggca aggactggct ggacgctaaa gcgacatggt 240
 atggcaagcc gacgggtgcc ggtcccgcg acaacggtgg tggctgcggg tacaaggacg 300
 tgaacaagcc ccccttcaat agcatgggcg catgcggcaa catccccatc ttcaaggatg 360
 gtctggggtg tgggtcctgc ttcgagatta agtgcgataa gcctgtggag tgctccggca 420
 agcccgtggt ggtgcacatc acggacatga actatgagcc ta 462

<210> 372

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-H8

<400> 372

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 ttctcaagac ttatttgccc ttgacaagac tggatgggaa ttggcactgg ttactgcacc 120
 aagtaaccac acaaatcaac aagtggacaa tcaattggct gggggatttg acaagctatt 180
 gctagacagt ctttacgaag acgaggcaag gaggcagcaa atagccagtg tgacctacac 240
 tggaaagtact gcagcaaacc catttgacca cagtgatcca tcttgcaaag tcagcccatg 300
 ggcagcgccg ctcttgacga gtttcgctg gcggccaaga gctccaccac ctccgacgcg 360
 tacgcatctc caaggcagca gcaagtcgcc agcagccagc ccatgtctgg tggcgctccc 420
 gacga 462

<210> 373

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-H9

<400> 373

tcccagatcg acccacgcgt ccggtcaaca tcttcatgta cggcgacggg cctaagcaaa 60

gccgcgtgac cggccgcaag agcttcgccg acggcatcac caccatgaag accgccacct 120
tctccgtcga ggcgtccggg ttcattctgca agaactggg gttccacaac acggccggcg 180
cggagcggca ccaggcgggtg gcgctccggg tgcaggggga cctcgcggcg ttctacaact 240
gccggttcga cgcgttccag gacacgctgt acgtgcacgc gcggcggcag ttcttccgca 300
actgcgtggt ctccggcacc atcgacttca tcttcggcaa ctcggcggcg gtgttccaga 360
actgcctcat catcacgcg cggcccatgg acaaccagca gaactcgggtg acggcgcacg 420
ggcgcaccga cccaac 437

<210> 374
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-A10

<400> 374

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gagtatatac aagagcctta gttctgttac tgtagagtt ggacatgggg aggcagcacc 120
gcaggagatt gagtgcgtgt tgccttaagg gtagactgcg caggtgaggt gacaaagagc 180
atgcactgca ctgcactgca ccacatatgt gcacgaagg ttgaagacga ccagcacctc 240
cggtcagaag agaggaagga gaggcggctg gagaaagaga gccaggtcag caggggtgttc 300
aaaccgccgg cggtagcaac gaatcttcct ctttttcttc ttttgcttga atttatgcct 360
tgtgacgtgc atctggaggc acgactgatc acaaaagaat acgagttttt ttaaagtaac 420
gcagcgcgaa a 431

<210> 375
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-057-Q1-E1-A11

<400> 375

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cagctgtctc aagattgaag catgagaatg ttgtccaact cgtcggatac tgcgccgaag 120
 ggagcaccgc cgtccttgct tatgagtatg caactagggg atcattgcat gatatcctcc 180
 atggtaaaaa ggggtgtcaaa ggagcccagc cagggccagt cctgtcatgg atgcagcgag 240
 ctaggattgc cgtatgtgct gctcggggtc tcgagttcct ccacgagaag gccgacctc 300
 gagtgggtcca ccgcgacatc aagtcaagca acatactgct ctttgaccat gatgttgcca 360
 agatcgggga cttegcacatc tcanaccagg ccctgacat ggctgcgcgc c 411

<210> 376
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-A5

<400> 376

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 caagccgacg ggtgccggtc ccgacgataa cgggtggctgc tgctggtaca acgacgtgaa 120
 caagccccc ttcaatagca tgggcgcatg cggcaacatc cccatcttca aggatggtct 180
 gggttgtggg tcttgcttcg agatcaagtg cgataagcct gtggagtgc cggcaagcc 240
 cgtgggtggtg cacatcacgg acatgaacta tgagcctatc gcggcgctacc acttcgattt 300
 atcacgcact gcgttcggcg ccatggccaa gaagggcgat gaggagaagc tgcgcaaggc 360
 tggcatcatc gacatgcagt tccgaatggt taagtgaag tacgactc 408

<210> 377
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-A6

<400> 377

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 ctcttggtcc tcttctgcat cgtgcatggt gagaaggaag agtcaaaggg catcgatgcg 120
 aaagcgccg ggcctggtgg gtccttcgac atcaccaagt tgggcgcctc cggcaatggc 180
 aagacagaca gcacgaaggc tgtgcaggag gcatgggcat cggcgtgcgg cggcactggg 240

aagcagacaa tcctcatacc caagggcgac ttccttgctg gacaactcaa cttcacaggc 300
ccttgcaagg gcgacgtgac catccaagtg gatggcaatc tgctggcgac cacggaccta 360
agccagtaca aggaccatgg taattggatc gagattctac gcgtggataa cctgggtca 418

<210> 378

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-A7

<400> 378

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gatgacgtca acgtcgagta tagcggcacc aacaacaaga ccatggctat atgcacgaac 120
gccaaagggca gcaccaatgg ttgcctcaag gagcttgcat gcttctagac cctccgtcga 180
ctgacccatc tctctagtta taatttttct ctgctccttg cattgcataat tagttgctat 240
ccattggtaa cgcacaacag tcctacgaca aacatccaac atctatatta tgttcgacag 300
tgtaacaccc tgaacttttag ggtataaaat ttcttcttta aatgcaaacc aaattcaggt 360
gttacctctt gtctctctct cgatcatttc cttttgatta aaagtaagtg aa 412

<210> 379

<211> 338

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-057-Q1-E1-A9

<400> 379

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gcccagagcat ctgggacaat ctgctgtaag gttcattgct agatggagtc gtccgtggac 180
tgctactgat tataattcgg aagcatgagg tggttaagaaa cttgagcgta gctaacgagc 240
atgttcacag gctgaaccgt gagagtggct gcgcattatt gtacactcag cttgagacac 300
attgccattc ggaagagctt gcacgattca tcgatgtt 338

<210> 380
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-B10

<400> 380

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cgtcgggtcg gcgtcgccat cgccggccat gggttgcggt ggctccaagg aggccgtggc 120
caccggcaac accagcgccg gcagcaaggt cctccggagg aagccctcct ccgtctccac 180
cggcgcaagc cacacatcca ccacgtcgcc gtcgtcctcc ggcgtcgtcg tcaaggacgt 240
cgtgaaggat gcggcgggcg cgggcgaagt gatgacgcc gccgacgccg aaaagcctat 300
ctctgtcgac cccaaggcag acgccatcgt ggtgatggac gccaagaaag aggagggcat 360
caacaacgtg agcgtggagg aggatctgctg tcctgaatcc accatggctg acgacgcgct 420
tgctgtggaa g 431
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<210> 381
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-B11

<400> 381

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agctaagcag gtctgacagg atgtcgtggc agacatacgt cgatgagcac ctgatgtgctg 120
agatcgaggg ccaccacctg acctccgctg ccatagtcgg ccacgacggc gccgtttggg 180
cccagagcac cgcattccca cagttcaaga cagaggagat gaccaacatc atgaaggact 240
tcgacgagcc cgggttcctt gccccgaccg gcctcttctt cggccccacc aagtacatgg 300
tcatccaagg cgagcccggc gctgtcatcc gcgggaagaa gggatctgga ggcataactg 360
tgaagaagac agggcaagcg atggtggctg gcatctacga cgagcccatg acccccggcc 420
agtgcaacat 430
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<210> 382
 <211> 306

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-057-Q1-E1-B12
 <400> 382
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 ctgcactccg ctcggaatag tcggccatga aagacgccgt gtgggcccac agcaacgcat 180
 tcccaaagtt cagaagacac gagatgatca agatcactga aggacttcga cgagccccgg 240
 ttccttgac ataacgggat cttcgtccga cccaccaact agatgggtcat ctcaacgcga 300
 acccgg 306

<210> 383
 <211> 151
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-057-Q1-E1-B4
 <400> 383
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 gcaccatcat cgactcacgc tacgtctata gc tctct caagcgtata ccaatatttc 120
 attggatcat ggaccgagtg ataaggatca t 151

<210> 384
 <211> 58
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-057-Q1-E1-B5
 <400> 384
 aacaccctat agtgagtcgt attaagcaga acaatggccg gccagaggca gccacggc 58

<210> 385
 <211> 322
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-057-Q1-E1-B6

<400> 385

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ctggtacaac atggctgggtg atggcatgga ggtatctgcc agcgggggtg gcggcggcaa 120

caagcagccg cagatcagcc ttttggggct gttcctcgtc tgcgtcgcca tggccttgggt 180

caccgtcctc agctcctggg ccctcggcga catccggggc aacgtgcacg acgccgccgc 240

cgtggataag ggcctcaaga ccagcgcgct cgccatcttc gtcttcacg gcttcccatt 300

cccggtccta cgcagcgttc cg 322

<210> 386

<211> 108

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-B7

<400> 386

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ccaggcctcg ccagtcggcg ctcccagcgt cgctgacagg aggagcaa 108

<210> 387

<211> 179

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-B8

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acatcaccat cacggaggca ggtgtctggg tcaacgctaa ggggagttgt ttgcgtgagc 120

ccaaccagtg cccgagatct gagactgttg gggatcgtgc aggggtccaca acttgatcc 179

<210> 388

<211> 121

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-C10

<400> 388

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g 121

<210> 389
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-C11

<400> 389

cacgcgtcca gcgcccgggg cccccggatc acggaatcct acccttacca accctagcct 60
ccattggtcg ccgtctcggg ccatggcagg gccggcgccg gatcggggccg ccctgactgt 120
gggtccgggc atggacatgc cgatcatgca cgacagcgac cggtagcagc tcgtgcgcga 180
catcgggtcc ggcaacttcg gcggtgccc cctcatgcgc gaccgccgca ccaccgaact 240
cgtcgccgtc aagtacatcg agcgtggcga gaagatagat gagaatgtcc agcgcgaaat 300
aattaaccat agatcattga aacaccctaa cattattagg tttaaagagg ttattttaac 360
accgacccat cttgctattg tcatggaata tgcctctggc ggtgagcttt ttg 413

<210> 390
<211> 311
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-C12

<400> 390

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ggatttgtaa tcgtgtccac tcgatcgaga gatcgatcga tgcttggtat tatatttgta 180
ttccacatta tatataagag atacagatta aattaaattt attccaaaat gcacgaacgc 240
cgcaacaaag aactcatcac cgtcaagtac atcaaaacgt ggcaaaaagg cggccgctca 300
agaggatcca g 311

<210> 391
 <211> 202
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-C6

 <400> 391

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 gcctgcccac ggagttcgag caccgaccca tcgccatgga gatgagaccg tgtccacagg 120
 gtgagacaga tccatcgatg catgatacga gagtcgagat ccacatggac cacaccaact 180
 ccgagatcga ctgcgtgaac cc 202

<210> 392
 <211> 278
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-C7

 <400> 392

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 ctcacggccg atagcgatca tcgatcaaag catatgcttc aagtgcagcc actgcagagg 180
 gatccgctcg atgtgcagct actcttccac ggccagtgtg ctgtgctgca agaccgacat 240
 cgagcagctc ttcaaggaga ccgggagctt caccaggg 278

<210> 393
 <211> 338
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-C8

 <400> 393

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 accaacttca cgtacaagtg gcagcccaag gaccagatcg gcagcttctt ctacttcccg 180
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<223> Clone ID: LIB148-057-Q1-E1-D11

<400> 396

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tgcagctgag gtcgatgggg atcaagtcgg tgatgctgac cggggacagc gcggcgggcg 180
ccaagcacgc gcaggagcag ctcgggggcg tcttggacga gctcgactcc gggctcatgc 240
cgg 243

<210> 397

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D2

<400> 397

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ccatgaggga gtgcatttcg atccacatcg gccaggccgg tatccaggtc ggaaacgcgt 180
gctgggagct gtactgcctt gagcatggca ttcaggctga cggtcagatg cccggtgaca 240
agaccattgg gggagggtgat gatgctttca acaccttctt cagtgcgact ggtgctggga 300
agcacgtgcc ccgtgctgtt tttgttgacc ttgaaccac tgatcatgat gaggtgagga 360
ctggcaccta ccgccagctc ttccaccctg agcagctcat cagtgggaag gaggatgcag 420
ccaacaact 429

<210> 398

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D3

<400> 398

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tcccatcaga	tcgatcgcg	aagttcaact	gaacatgcac	acaagcacca	gacagaaagg	180
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aggagaacag	tgcgtgtacc	ctaccgtgca	acagccacac	acacgacacg	ttacgtttacg	300
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acttacacgg	gcactgtg	ggtgtgtg	tt			392

<210> 399
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D4

<400> 399

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cccggtcaca	tcgccatgaa	ttgccctaac	aagaataaga	atggcacaga	tggagatgat	180
aagaagaaga	ataaattcta	caacaggaag	aaagatggca	gagcctacct	agttgaatgg	240
gatttgata	atagctcgga	tgatgatgat	gatgacacct	catccaaact	taatgccgga	300
atggccatca	atgaagcccc	ttcacttttc	tcacccctc	attgtctcat	ggcaaaggga	360
gatgctaaga	atgttacgtg	aggccgatga	ctacatggac	aaagaaaaag	aaaagtcat	420
gaccttgaag	gaattgtata	aaaacc				446

<210> 400
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D5

<400> 400

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ttaggaccac	gtcgtgatc	acatcatatc	gatcgcgcac	gttcacctga	acatgcacac	180
agacgccaca	cgcagaggaa	acaatgacgt	aacggaaggc	gacggctgtg	cctcgatcga	240

catcctcgac cagatctaag gagaacagtg cgtgtaccct accgtgcaag aggcacacac 300
 acgacacggt acgttacgta cgtacttggt ccttagataa catttgcatg catgcatgca 360
 catgcatcta ctacggcgac ttacacgggc actgtgcggt tgttgt 406

<210> 401
 <211> 151
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D6

<400> 401

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 aatttcaata cacaggggac agaccggtat c 151

<210> 402
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D7

<400> 402

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 ccatccagta catcgattct ccccccaaga tcaaaggccg gaggaggaag aaagtttata 180
 attttgacc tagccggttc ccagcccaa cccctgtcat ctccactggc agagctcagc 240
 caattgcagt accggccatt catctggaag agctgaagga aattacaaaa aacttcagca 300
 gtgatgccct cattggcgag ggctcgtatg ccagagtcta ttttggtgtg ctgaaagatg 360
 ggacgaaatc tgcagtgaag aagcttgact ccagcaaaca gcctgatcaa gaattccttg 420
 tgc 423

<210> 403
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D8

<400> 403

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ttgtctttga tcccatccag tacatcgatt cgccccccag gatcaaaggc cggaagaaga 180
atcaagttta taatttttga tctagccggt tcttacctga atgcgatgtc atctccaatc 240
gcagaacatc atcaagttga gttctcagcc aatcatccgg aagggctgag cgacattaca 300
gcccccttca ttagtgatgc cctcaatggc gacggctcat atgccagagt ctattttggt 360
gtgctgagac atgggacgaa atctgcagtg aagaagcttg actccag 407

<210> 404

<211> 235

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D9

<400> 404

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cgtgcttgct ctgcaggatg caccagtggc ctagctgggt ggtctcttcc aaaataccaa 180
tctgtgcgag atccatgcca agcgcgtgac catgatgcca atggacgttc agctg 235

<210> 405

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-E11

<400> 405

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acgaagccta agacgcttga ggggaaagcc ccagctgagg ccaccatctc cacaccaag 180
gttgacactg agaccactac catccacatt gaggttgctg caaaacatgc agtagttgag 240

aaggtggagg aggacaagga ggaggcacta acagtggcgg cgaaacaaga gccagcagcc 300
accattgagc ctcagcagat tgctagttag gtgaccactt cggaagtggc ggtcgtcgtt 360
gtcagacctg agaacaaaga ggaggaggaa gttgtggaga agaccgtcat cgag 414

<210> 406
<211> 340
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G12

<400> 406

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ccatggtaaa aaggggtgtca aaggagccca gccagggcca gtcctgtcat ggatgcagcg 180
agctaggatt gccgtatgtg ctgctcgggg tctcgagttc ctccacgaga aggccgatcc 240
tcgagtggtc caccgcgaca tcaagtcaag caacatactg ctctttgacc atgatgttgc 300
gaagatcggg gacttcgaca tctcaaacca ggcccctgac 340

<210> 407
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G2

<400> 407

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acgcgcattc cgtcaacctc accgctaacc aggagtactg ggcgagcgc gcggaggcgg 180
cgcacgcgta caaccgcgcg gcgtaccaga ccgaccccggt ggccgtcgtg cagcgcttca 240
acgacggcgt gcacagggcg acggcgacgc ggtcgcggtc cctggcgcac agggcgcggg 300
gcccctgcac ggcgaccaac cccatcgacc agtgctggcg gtgccgccgc gactgggccc 360
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tgggcg 426

<210> 408
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G5

<400> 408

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tgggccgctg tgacggggcg caccgacggc atcggccgcg ccgtcgcgtt ccgcctcgcc 120
gcggccgggc tcgggctcgt cctcgtcggc cgcaaccggg agaagctggc cgccgtggcc 180
gccgagatca gggccaagca cccaaggtc cccgaggtgc gcaccttcgt gctcgacttc 240
gccagcgatg ggctcgcggc cggcgtcgag gcgctcaagg actccatccg gggcctcgac 300
gtcggcgtgc tcgtcaacaa cgccgggctg tcttaccgt acgcgcgcta cttccacgag 360
gtggacgagg agctgatgcy cagcctcatc cgggtcaacg tcgagggcgt cagcggggtc 420
acgcacgccg tgctgcc 437
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<210> 409
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G6

<400> 409

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cgggaaatgg ggagaaaagg caagtgggtc gacaccgtgc agaggatcct gatcacctct 120
gaacctgatc ccgtggagac gcagaacgat gatgccgcca aggactggaa gctcgatcat 180
cacgagaagg ctgcgaagct gagagacaat aagtcggcca tcaggaggat atggcagttc 240
ggcaaataca actcgtccgg tgcttccgcc tccgcgacgg cgccggagga cgcgaggtt 300
cttcagtttc cgaagtcgcc aaggtcggac aacgagtacc atgtcgtcca ggacctcacc 360
gaggaggtgc cgttcatgga gacgagaggc gaggaagaag aagaagaaga cggcgagcgc 420
atgaaccctg gggatg 436
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<210> 410
<211> 82
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G7

<400> 410

ttactacacc ctaaagtgag tcgtattaat gcgtcgatgg gcggccgttg gtgtcgggga 60
gactccagag tgtgtgagga ca 82

<210> 411
<211> 458
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G8

<400> 411

taaagggtcca gaagtcccggt gtcgaccac gcgtccggcg cggaccacgc ccgtggaccc 60
aaagacgcac ggcacgggtc tccccttcaa caggtactca tggctgacga cgcacaactc 120
gtttgcggtg gtgggcacca agtcgccgct ggggtccgcc atcatctctc cgcccaacca 180
ggaggactcg gtgaccgacc aactgaagaa cgggtgtgcgg ggcctgatgc tggatgccta 240
tgacttcaac gacgccgtgt ggttctgcca ctcttccac ggccgttgcc tgaccttcac 300
cgcctacgtg ccggcgctga gcgtgcttac ggaggtccgg gtgttcctgg acgccaaccc 360
gtccgaggtg gtcaccatct tcctcgagga ctatgcagcg ccgggggtcac tcagcaaacac 420
tttcaacgcc gccggactgt ccaagtactg gttccccg 458

<210> 412
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G9

<400> 412

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tacgaagaag gcgacgaaca tggcgaggct ggccttggtg gcggcggtgg ttctgtgcct 120
tctattagcg acagggccgc agggggccgt cagcgccgag gggatggtgt catttgacaa 180

tttgcacgac tgcaagggtac tgggcaactg cgataagaac ctgggccccg aggcctcccc 240
cccagggaaa cccgccaacg actacacccg cggctgcaac ccgatcaccg gctgtcgcgg 300
ctgatcatat ctctctgggtc gatgtgcgcg caatgtcaat gtcgcacgcg cgtgcaggta 360
ccaggcctta gcgtgtgggtg cggcgtgtgt gtatatatta cacacatgca ttatacattg 420
gtcgtccatc gttac 435

<210> 413
<211> 426
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-061-Q1-E1-H1

<400> 413

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ggacatgata gacaacatcg acggccgtcg ggtaaccaag aacaaggcgc gcatccaagt 120
tggcgactcc tcttcgtcgg acgaaagcga cagggagaag gaggaagatg aagaagaagc 180
acatgaggaa gtggccaagg ccccccgct gggttggaat catcacaatc accacgaagc 240
ggccggcggc attggcagca acagcaacag gaggcggctt ctgtcgaagc agctgtccat 300
gaagaagacc accagggaga tcaaattggga gaagcgccgg cggcagataa tgcggcgag 360
cagcctgggtg gtgtcggtta acgacgacgg aggaaganga ngctgcggca gcatgaagag 420
cgccgc 426

<210> 414
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H1

<400> 414

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gcaaccgcca catcagccat gggcgctgc gcaaccaagc ccaagacgct tgaggggcag 120
gccccagctg agggccgcgt ctccacaccc aaggttgcgc ccgaggccac tccaatctcc 180

gttgagggttg cggctgatga acaggtagct gagaagggtgg tgggtggagga gccgggtgcg 240
 gcggccgacg ttgagcatca gaaggctaata gaggtgctcg ctccagaggc ggccgtcgcc 300
 gagccccgacc acaaggagga ggaagccgtg gagaagaccg tcgtcgagga ggagaagcca 360
 gcggcagcag cccatgcaga ggaaaaggtc gccaccgccg ccgagaccac gacgacggtg 420
 gaggcgaaga aga 433

<210> 415
 <211> 385
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H12

<400> 415

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 ctcagtcctt cccccgacat caccttcacc gagtcgcagg tcacattgtt ggagatgctc 180
 ttagcttttag cttgtctgcc tcgcgcgggc aaacatgtca gaaactgcgg tacgcatcag 240
 tcggacaccg cgatcgcggg ggccatgcat gctgtcagct cttgaccctt gtcaccatcc 300
 aatccaatgg cgatcggtcg atcgtcttgt cagcattcac aaccgttgcc tgatgacgcg 360
 cgcgcgataa catgccgtgc gtgcg 385

<210> 416
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H2

<400> 416

gtcgacgcac gcgtctggac tctgtcggag caggagacgt gccgcgccgc ggacttctcg 60
 cgcgatgcct ggtcaggacg gtgggcgcgg ctgcgaaca acgacagctg cgaggacgctc 120
 aacgcatcgg ggcggtaccg gtgcctgtag ccggaccacg cgtgcgatgc accgtggtgc 180
 gacgggccgc tcggcacgct ggcgagcaac ggggtgggtgt agtcagcgca gtgctccttc 240
 aagctcttta cggccgatgc gtccctggcg tgccttgacg ggaagtggct cttcttctcg 300

ggcgactcta accacgtcga ctgcatccgg aaactcctca ctttcgtcct cggcatcacg 360
gacacgtctg ctgtgacacg ccggtttgat gcagtg 396

<210> 417
<211> 450
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H3

<400> 417

ctcacgggtc gacgcacgcg tccacaacaa tccgttccag ccgccaacaa aaacccaaaa 60
aaaaaacac actgaaccca ataatccgat cccacagaaa cttttctctc ggtccgttcg 120
atcgatcgct gccgtgtcgt ttgccagaca ccatcagcac ccaaaaccat ggcctgcaac 180
ctggctcagt gcgccaccgc cgccgcgggc accgtcgcgc cccgcacccc tcgccctgct 240
gcgtccgcgt ccgtctcctt ctccgcgagg aagccggcgg gcggcagcct gcggctgcag 300
cggcaggcgt gctgcgagcc gtccgtggcg ccgtcgcggg cgggtgttcgc ctgccggggc 360
gcggcgctcg ggagcgcggc cgacctggcc tccgggggca agaggtcgtc cggcggtgccg 420
gtgttcctca tgatgccgct ggacaccgtc 450

<210> 418
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H5

<400> 418

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ggccatggcc tgctcaccg acctcgtcaa cctcaacctc tcggacaaca ccgagaagat 120
catcgcgga tacatatgga tcggtggatc tggcatggat ctcaggagca aagcaaggac 180
cctctccggc ccggtgaccg atcccagcaa gctgcccag tggaactacg acgggtccag 240
cacgggccag gccccggcg aggacagcga ggtcatcctg taccgcgagg ccattctcaa 300
ggacccattc aggaggggca acaacatcct tgtgatgtgc gattggtaca cccagccgg 360
cgagccaat 369

<210> 419
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H7

<400> 419

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tttaccggcg acgagcacac accagggcac tggagggcta ccatctgctt cgctttctga 120
aaaaaaaaaca gtttcggcat aattatcacc ctaagatgcc tgggaattaca atggatggat 180
ttgttgacga ggagggtgccg aacaggggtga attcctctcc acagaatgaa aatctgccccg 240
cccaaattc gacggcagct tcaacaatgg cgccaagcat gcaaagtga gcaacttgaga 300
tgcattgaga gagctccgtt actggggagc cctcaattga gcagctctac aacaatgtgt 360
gcgagatgaa gagctcaagt gaggggtggct ccctgtcaca tgagagcttt ggctc 415
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<210> 420
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H9

<400> 420

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ccacgcgtcc gcaagcacct cctcttcccc cgccgggcaa caactcagcc gccgcaaccg 60
ccacatcagc catggggcgc tgcgcaacca agccaagac gcttgagggg caggccccag 120
ctgaggccgc cgtctccaca cccaagggtg cgccgaggc cactccaatc tccgttgagg 180
ttgcggctga tgaacaggta gctgagaagg tgggtggtga ggagccggct gcggcgcccg 240
acgttgagca tcagaaggct aatgaggtgc tcgctccaga ggcgcccgct gccgagccccg 300
accacaagga ggaggaagcc gtggagaaga ccgtcgtcga ggaggagaag ccagcggcag 360
cagcccatgc agaggaaaag gtcgccaccg ccgccgagac cagcacga 408
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<210> 421
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-A10

<400> 421

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tgccgaggat atccagcccc tegtctgcga caacggaact ggcatgggtca aggctggggtt 180
cgctggcgac gacgccccga gggccgtctt cccagcatc gtggggcgcc cgcgccacac 240
tggtgtcatg gtcgggatgg ggcagaagga cgcctacgtc ggtgacgagg cgcagtccaa 300
gaggggtatc ctgaccctca agtaccctcat cgagcacggg atcgtcagca actgggacga 360
catggagaag atctggcatc acaccttcta caacgagctc cgcgtggctc ccgaggagca 420
cccg 424

<210> 422

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-A11

<400> 422

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cttctggctg ttgtacctga tgctcagagt agacgctggc tgctgctccg caaggaaact 180
gactcccccg accgccgttc atgctcctgg ctggctggct cgctggccgc ctcgacggga 240
acgctgccgt agaatgacga ctggggctgg tgttgttgtt acagtatggt ccttttttct 300
ttcttctttc ccttttcatc cattaagctc tgtgatgtag ctgcccgtgg tgttgattca 360
tgaaatcatg ctagagattt tttctggca gtaagtgcgt gcctgtaaaa ctgtcgaact 420
atttgacga aagttgtaca ctg 443

<210> 423

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-A12

<400> 423

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ccccccaag cccatgtccg tgtacgccac cgtgtgggac gcctccacct gggccaccgc 180

cgggggcccgg taccgcgtca actaccgcta cgggcccttc gtcgcctcct tcaccgacct 240

ggccctcctc ggctgccgcg ttgacgggcc catccagcag acgacggcgg agcggtgcg 300

cgcagccgcc gaggcactca gggcgtcggg cgtggccgtc atgacgggtg agaagcagca 360

agccatgcgc aggttccggg agcgcaacat ggtctactcc tactgctacg acacgtgcg 420

ctaccccgcc gcgttcc 437

<210> 424

<211> 183

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-A7

<400> 424

ccacgcgtgc gcggacgcgt gggatgacca ccctgcctgc aaccttttgt acaaatagta 60

ctaattgtag ttagattact gtgatacagt caaaaggaaa tttgtatgat gatcagggtg 120

catgtaacca gaatcatcaa tcagcctgta aaaagagaat atgtgaaaat tgtattaagc 180

tga 183

<210> 425

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-A9

<400> 425

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ggccacgagg gtgacgcgtg tgcgcaaaga acgggtttcc ccgagttcaa gaggaggag 120

atggcgaaca tcatgaacga cttcgacgac ccacaggacc tcgcaccaac aggctgttc 180

ctcgggctga cgaagtacat ggtcatccaa ggagaacctg gtgctgtcat ccatggcaac 240

aagggatcag gaggcacac cgtgaacaat ataggtcatg cactcgtggt tggcatcgac 300
gatcagccga tgacgcctgc gcaatgcaac atgggtgcttg caacgctagg cgactatgtg 360
cttgaacaag gcatgtgact actacgtagc agct 394

<210> 426
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-B10

<400> 426

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caccctggcg gattacagca tccagaagga gagcactctc cacctgggtgc tccgcctcag 120
gggtggcatg cagatttttg tgaagacatt gactggcaag actatcacct tggaggtgga 180
gagctctgac accattgaca atgtgaaggc caagatccag gacaaggagg gcattcccc 240
agaccagcag cgtctgatct ttgcgggcaa gcagctggag gatggccgca ctctcgcgga 300
ctacaacatc cagaaggaga gcacccttca ccttgttctc cgcctcaggg gtggtatgca 360
gatctttgtg aagaccctga ctggaaaaac cataac 396

<210> 427
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-B11

<400> 427

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gtcgccgatg tcgccaacgc cggccacgcc aagcccctga cgcctggcgg gcgcgtggta 120
cacgacaacc acggcaagtt cacggccggg ccgtggaaac ctgcccacgc gaccttctac 180
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caggggtacg gcgtgcagac ggtggctgtg agcacggtgt tgtttggcga tggcgcggcc 300
tgcggcgggt gctacgaggt gcggtgcgtg gacagcccca gcgggtgcaa gcccgcgcg 360
gcggcgctgg tggtgacggc gaacgacctg tgcccgccca aggacaagtg gtgcaagccg 420

ccgc

424

<210> 428

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-B12

<400> 428

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gcagagcatg aggattgtgg cgctggccct ggtggccctg ctggtggtgg cggcggcggc 120

gcccgtggcc accgcgtacg gctgctacga cgactgctac gagcgctgcg ccaacggcaa 180

gaaagacccc gcctgcacca agatgtgcaa ccaggcgtgc ggctccacgg atcagggcgc 240

cggtgccgcc ggcgccgcgc cggcttgatc gcccagcgca ttcacgcgtt cagctcgata 300

taatcgctgc tccgtcagca acccacatat gattcgatca attttctctc tctaatttct 360

cgaccccgtc gaatTTTTTT cttttctatt cttctactat actactacta tctgtttgtc 420

gcgttgaatt cttctcatac at 442

<210> 429

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-B9

<400> 429

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tccctgccaa ctggaaggcc aacaccgcct acaccgcaa ataattaact ttagtgctga 120

caatacttta agccgaccta tgctagctat actagattgg gttggatccc aagcaatgca 180

ttacacatgc atgcattgga ccgtgatatc tatttgctac cactacccta ttacgacagt 240

gatgctggcg ccaacaatga tgggtgtcatc ctccttctcc atcttcttca tctccatata 300

tagctagagt gagacttcgc tgttgtttaa aagagaagag ttaagaaatg gattgacacg 360

ttatat 366

<210> 430

<211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-063-Q1-E1-C10

 <400> 430

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 aacctggtgg agatgtaccg caagatcagc agagccgacg tcaagtaccc gcagtgggtc 180
 tcccctgagc tccggcggtt gatgcccag ctcctcgaac cgaacccaaa caacaggatc 240
 acgatcgaga agctggtcga gcacccttg ttcaagaagg ggtacaggcc ggccgtcatg 300
 ctgggacagc cgcacggctc cagcagcctc aaggatgtca aggtcgcctt cagcaacgcc 360
 gaccacaagg acagcagcac caaggtggaa cagccggcgg acagctcctt gaagccgggg 420
 agcctgaa 428

<210> 431
 <211> 345
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-063-Q1-E1-C11

 <400> 431

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 tgcaccgcag gtgacatgtc gaccatggtg tcaggtatct tgatctcaat gtccatcctc 120
 tttagaata gtgaacaggt aatgaatgg gcgttaccta gattagacga ttacaggac 180
 atacaccttg ctgagctgc cgtactagga attcagcacg gtgcaatcgg ccatcgaaac 240
 agtggccgac ggtaaatcgc aatgggtaag cgtccagtac cggcttagta tgcacagggg 300
 ctgtgtgtg aaaccggaga gtagacgctt catcttcgag agggg 345

<210> 432
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-063-Q1-E1-C12

[illegible]

<210>	433
<211>	208
<212>	DNA
<213>	Zea mays
<223>	Clone ID: LIB148-063-Q1-E1-C3

<210>	434
<211>	564
<212>	DNA
<213>	Zea mays
<223>	Clone ID: LIB148-063-Q1-E1-C7

182

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 gtggttaaca ccttacgttg taagacttta ttcccccgct ttgcaactgg gtaattaatt 360
 ttggcgtaat ggTTTTcttg 380

<210> 437

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D11

<400> 437

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 gcggtggctc caaggaggcc gtggccaccg gcaacaccag cgccggcagc aaggctcctcc 180
 ggaggaagcc ctctccgctc tccaccggcg caagccacac atccaccacg tcgccgtcgt 240
 cctccggcgt cgtcgtcaag gacgtcgtga aggatgcggc ggccggccggc gaggtgatga 300
 cgcccgccga cgccgagaag cctatctctg tcgaccccaa ggacagacgcc atcgtgggtga 360
 tggacgcaa gaaagaggag ggcaacaaca aggtggccgt ggaggaggat ctgcttcctg 420
 aatcc 425

<210> 438

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D12

<400> 438

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 attgttgctc ttcagaggca aattatgaaa gagcaagatg agggctctga gaaactggaa 180
 gagacagtgc tgagcacaaa gcatattgca ttagcagtca atgaagaact taccctgcac 240
 acaagattga tagatgacct tgaagatcat gttgatgtta caaattcacg tcttcagcgc 300
 gtgcaaaaga ggcttgcaat tctgagcaag cgcaccaaag gtggctgctc atgtatgtgc 360

ctgcttctat ctgttgtcgc catcgtgatt cttgcagtc

399

<210> 439

<211> 261

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-063-Q1-E1-D2

<400> 439

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agangagatc cgcacggaga aacagtgggc cttcgagtaa ggaagtgctg gatctattga 120

tgcctaagtt tcgtggtgct tactactatg tctactttat gttgtcctaa tggttgtaag 180

tattttggga gtcactttgc ttgcgaatgt ctgcgctaag acttatgtgg tcaatggctc 240

gttattaact tattaccatg a 261

<210> 440

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D9

<400> 440

ccacgcgtcc gaccacccct cagcgcgacg aaggtaagat gttcctgcgg aggatcctga 60

ccggcggggg cggcctggcg gccctgaggg cggcgcgcgc cgtgaaggag acgacgggga 120

tcgtgggcct tgaggtggtg cctaacgcgc gagaggttct ggtagggctc tacgagcgca 180

cgctcaaaga gatcaaggcc gtccccgaag acgagggtta ccgcaaggcc gttgaatcct 240

tcaccggtca ccgcctccag atctgccagg aggaggagga ctggaagcgc atcgaggacc 300

gaatcggatg cgggcaggctc gaggagctca tcgaggaggc cgaggacgag ctcaagctca 360

tcgctaaaat gattgaatgg gatccatggg gtgttcccga tgactacgaa tg 412

<210> 441

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-E10

<400> 441

ccacgcgtcc gtttgcacct ttttccattg ttaagagcag tagatggtga ggaagtacct 60

ggagagggtcg tgggtgtcaac ggaaaacctg gcaaggggga tgacgaacga cttaatcctc 120

cccgtgcagt acttcgtctt ggatgccatc ttggacgtgt tctgcagtac ggcgatcggc 180

aagcatgacc actttctcaa tcccgggtggc ccaggctgca tgcacctcct tctcggacag 240

acacttacct gcatgacagg gtacctcttg ccatcaccgg agttcttgat gaccttgaag 300

ctctgaccgt aatatatccg gaatatggtg gcgtcctcca ccctggacac gggccggggc 360

atcacaggcc cgggcccggc ct 382

<210> 442

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-E11

<400> 442

ccacgcgtcc gaccacgcgt ccgcccacgc gtccgcgaag ccggcgctcc agctcaaccc 60

cgcgcccgtc ctctccgcc gcctgccgac cccgaccca acagcggcga cgcccgtcac 120

cgcgacggcg cccccgcgc gggccgccac cgcgctccaa ccgctcgcgg ccttgctcgt 180

ccccttctgg cgcggggtgc ggcgagcgcc gaaacagccg gtccaccccg cctccgccgc 240

cgcggcgcgg agggcgggcg agcagcagga ggcggaggcc gaggcggagg cgcggcagct 300

ggtgggggtgc gcggtgccgc tgttcgggcc gtacgtggca cagctgccgt ggcacggcgg 360

cgcccgggcy tggtgtgca agctgttccc 390

<210> 443

<211> 483

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-063-Q1-E1-E12

<400> 443

gtacgagtca gaattcgcgg gtcgaccac gcgtccaatg gtattgtgat tatatggcaa 60

taaaattttg aactgaatat ccacattttt tgtataggaa aagaaccatt acatcactag 120
gtcaccgtag cagaaggtaa taatagtaca taatacaaac atgataacat ggaatgcaaa 180
aggtacagga tttctacaac taagccatct gtttctaaca tgagtagaag aaatgacagg 240
acaggtaaac aaacctctgc agagactgca actgcatcaa accagtgggc acatttcaag 300
gcctgcagaa gtggccgtag acgggtatca aaattggaga ccaactgcagt tttaacacca 360
gctttcctca nagctttgaa tacattttca gcatcagggt cacaaagctt cgaggcctan 420
cangcataat aatcttctcg ttagtcgagt tgaagtcaga gacaacgaaa gaatgttggt 480
ttg 483

<210> 444

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-E9

<400> 444

ccacgcgtcc aagagtcggg tgccttggtt cacatgacaa attaatgtctc aagggtcttg 60
atgcctgtat gaactcaaga tttatgggtg atcctggaac tgtgggatgc caaacctggg 120
ctaactacca cattatgaac tctctgctga tctaacagca tttctacaaa aattcttttg 180
ccggaagggtt cattattcat gtgtaacaat gaacgaacat ctactgttta agattgggtga 240
cctacgcatt cttgaccgga actaggtcat tgggacagtc atgaagtact caactgggga 300
aaccattgca catccaatct ccatggcgca atccatttta acagtgggac aaaggatggc 360
ttctgatgcg gcacctcatc tgcaacttgt ggagtgtcac atttgtcag 409

<210> 445

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-F10

<400> 445

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cgcggtcctt ggcgcacagg ggcgggggcc cctgcacggc gaccaacccc atcgaccagt 120

gctggcggtg ccgccgcgac tgggcccgcg accgcaagcg cctggccagg tgcgccatgg 180
gcttcggcca caagaccacc ggcgggctgg cccggaagtt ccacgttggg gatggcccca 240
accaagaagc cggcgaactc ctcaacccca agaagggcaa gctccgggaa gccgttaccc 300
cggcccccggc cctgtggatt aacttcgcgc gcgaaatggg ga 342

<210> 446

<212> DNA

<223> Clone ID: LIB148-063-Q1-E1-F9

ccacgcgtcc gacctccatc tccagcatat gtgagtgaac cgcctccaac ggtgaaatct 60

tcacctccat cgtcagtgaa atcaccacct ccttcaccac tgттаagttc gccgccgcca 180

aggtcgccac cccaccaca agcaaactca cctcctccat cagctctaataagctcacct 300

agatcaccac caccggctcc agtatgctca ccacctctc tggcgcaatc ccctccatca 420

<210> 447

<212> DNA

<223> Clone ID: LIB148-063-Q1-E1-G10

accacgcat cgcacaatc atcaaaagaa ataaaaaaca ataaaacaaa aaaaaaaaaa 60

aaggtcagcg acaaaggggc gtgccctcta aaqtttgagg gtttcaattc cctggcctcc 180

ttttggatgg gtaaaccttg gcctttcccc actttaaccc ctttgccgta cccctctt 299

<210> 448
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-063-Q1-E1-G11

 <400> 448

 gtaccgtatc cagaattcgc gggtcgaccc acgcgaccga ggcgatcgat ctggagattc 60
 cggggccctc ctgcaaacgg tgccggtcgg gtagcagggg gtgttctcat cacggtaagc 120
 gccgccggca gaatcggcgg tccgaatctc caggaaccgg cgattccacc tcaacgactc 180
 ccacatctgt gcgaagatgg cgtacactcc tttggatacc ctcaaattggg ttgtaaagga 240
 aatggagatg aactcggtcg aggttaggca gacggttggt catcctacca actcatctta 300
 tgaactccag cagcttattg acaagatcct agacttatcg gattggttgg acatggttgc 360
 cattcaatgt gcataagtta ttaccaatta caaccaccc cctcaccac tacagaagag 420

<210> 449
 <211> 408
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-063-Q1-E1-G12

 <400> 449

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 cggcccaacc tgaatggtcc tccaccaaga aggaaaaagg gagggaggga acggaagcat 120
 caaccatgtc caactccgcy tccggaatgg ccgtccgtga tgaatgcaag ctcaagttcc 180
 aagagctcaa ggcaaagagg agcttccgcc tcatcgtgtt caagatcaac gagaacgtgc 240
 agcaagttgt ggtggacaag ctgggggggc caagaaaaaa ctacgacgcc ttcacggcct 300
 gcttccccgc caacgagtgc cgctacgccg tgtccgattt tgacttcgtc actgacgaga 360
 actgccagaa gagcaagatc ttctttatct cttgggcccc ggatacat 408

<210> 450
 <211> 357
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-063-Q1-E1-H10

<400> 450

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gaaggagaaa tggcttccgc acacaacgct ctccgggtgt ttttcattct agccgtggta 120
tgtgccgtat gcacagcgaa aaggacagga gccacaagg aagaatcggc ggcagcccc 180
ggtggcgctg ctggaggcag cggcgggacg ttcgacatct ccaagctcgg cgcgaccagc 240
gacggcaaga cggactgcac aaaggcagtc caggacgcgt ggacgtcagc gtgcgaagcg 300
accggaagcg ccacggtggt gattcccaag ggcgactnac tgntcggccc tctcaac 357

<210> 451
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-H11

<400> 451

ccacgcgtcc ggtaaaatca cctccatctc cagcatatgt gagtgaaccg cctccaacgg 60
tgaaatctcc ttcaccacca tcacctccac cgatgattaa atcaccgcca ccaccggtgc 120
cggtgaggtc acctccatcg tcagtgaat caccgctcc ttcaccactg ttaagttcgc 180
cgccgccacc agcgcctcgt aggtcacctc caccgctaac gaaattatca cctcctccac 240
caccgataag gtcgccaccc ccaccacaag caaactcacc tcctccatca gtcctaataa 300
gtcacctcc tcctccgatg caatcccctc caccgctgc tccagtcagc tcaccaccac 360
cacctataaa atcaccaaca ccggctccag taagctcaac a 401

<210> 452
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-H12

<400> 452

ggtcgaccca cgcattccgat tcaagcacct cctcttcccc cgccgggcaa caactcagcc 60
gccgcaaccg ccacatcagc catgggcgcc tgcgcaacca agcccaagac gcttgagggg 120

caggccccag ctgaggccgc cgtctccaca cccaaggttg cgcccgaggc cactccaatc 180
tccgttgagg ttgcggctga tgaacaggta gctgagaagg tgggtggtgga ggagccggct 240
gcggcggccg acgttgagca tcagaaggct aatgaggtgc tcgctccaga ggcgggccgtc 300
gccgagcccc accacaagga ggaggaagcc gtggagaaga ccgtcgtcga ggaggagaag 360
ccagcggcag cagcccatgc agaggaaaag gtcgccaccg ccgccgagac cacgacga 418

<210> 453
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-H9

<400> 453

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gacaggtaca tgcgtagccg cctgcaggcg gcagcggagg cggccggcaa gcctgattgg 120
ggccacggtg ggccgaccga ctctggcggc tacaacaact ggccggagga caccgtcttc 180
ttccgcggcg acaacggtgg gtggagcacc gtgtacggcg acttcttcct gtcgtggtac 240
tcgcagatgc tgctggagca cggcgacctc atcctgtcgg gcgccacgtc cgtgttcggc 300
gccgcgcccc tggaggtctc cgtgaagggt gccggcatcc actggcacta cggcagccgg 360
tcgcacgccc cggagctcac cgcgggctac tacaacacgc ggtgccacga cgggtatctc 420
aacatccccg gcctcc 436

<210> 454
<211> 458
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-A10

<400> 454

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aagtcgaaca agaagaaaga gaaaactcgg aagaagcaaa gttgtaagtc tagcggtgaa 120
aagaacaaga ataagacaag ttcggaagga aaatatttgg aacaaccaga ctcttgctac 180
gaaagcaaag atgaagacag ttggagtggg aacagtagta gttcattatc gaagagacca 240

actcagcatg cttttggcgc aacgagtcga ttttcaaagg atacagtaca ctttgttcaa 300
gatgaatcta gtcgttactc caatggacct atcatggata aagatttaga agagtgggaa 360
gcagatattg aggcggaagt ggaagctttc cgtaagagac tcgaggaact tagtgcgcca 420
ttgaagaata agccaaaggt cgggtgccttt ccgcatcg 458

<210> 455
<211> 454
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-A11

<400> 455

ccccgggggca caacgacgcg tcagcatttt tggatttttg gattcgtttg ttgttggctc 60
ggttgctcaa ggtgtgaaat ggcagtagtt gaagataaca gagtctttgt tgggtggcat 120
ccttggtcag ttagtgaaga agaccttcgt gaaacttttt ccaaatatgg agaagttgtt 180
gatgcaaggg tgaatatccg tgttcctttt gttttgggtt aaacttggat cccttgacta 240
cctgcacctt ttctcgggtt cccttttatt tgcccatag ttagtgtcac taactagtcg 300
catgttactt tgagagggta gagagctttt cgagttactt tataactgtt cacacttggg 360
aaccctcgaa aatagtgtga atgatatgca cttgggttga ctagtgtaca ccaaagttgt 420
tgttactata tagtgctcac aactgtgtcg ttgc 454

<210> 456
<211> 203
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-049-Q1-E1-A8

<400> 456

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gcgtcatttg tatggcttta atttttttta ttatatatag ataaggaaat attttcctta 120
aaaatggagt acaagggatt gttgagaact gcttttggtc atgatattaa tatatatgat 180
gaatatttct tgcaatttcc ttt 203

<210> 457
 <211> 506
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-049-Q1-E1-B10

 <400> 457

 ggtccggtat tccgggtcga ccacgcgtcc ggttaacctc ctcttgcatc gcattgcagg 60
 tcgtagttga gcagcagcaa ccaactgcaca ggatgtcgtg gcagacgtac gtcgatgagc 120
 acctcatgtg cgagatcgag ggccaccacc tgagctctgc cgccatagtc ggccacgacg 180
 gcgccgtttg ggcccagagc accgcattcc cacagttcaa gccagaggag atgaccaaca 240
 tcattaagga cttcgacgag cctgggtttc tggcccgat cggcctcttc cttggcccca 300
 ccaagtacat ggtcatccaa ggcgagcccg gcgctgtcat ccgcgggaag aagggatctg 360
 gaggcataac tgtgaagaag accggacagg cgctggtgat cggcatctac gacgagccca 420
 tgacccttgg acagtgaac atggtggttg agaggctcgg tgactacctc gtaaagcaag 480
 gcctgtgaat gcatccaaac aacgac 506

<210> 458
 <211> 343
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-049-Q1-E1-B3

 <400> 458

 gggtagaccc acgcgtccgg gcaagtgtgg cagaccgggg aggacctcac atgcgagtcg 60
 ctgacgttcc gggtagatgac cagcgaccac cgcaaggcca cctcatggca cgttctccct 120
 gctgactgga agttcggcgt cacgtaccag gcgtccaaga acttctaagt agccactttc 180
 cctcctcttc ttcaacctgc atgcccgcaa gcagccatgc agatgataac atgcatcatg 240
 catgcatatt cattctttcg ctcatgcact ccgatacggg gccggagtta aaaaaatata 300
 aatcaatgtg caaattcaaa tgacatctta accagttgtg atc 343

<210> 459
 <211> 293
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB148-049-Q1-E1-B6
 <400> 459

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cctgacgtac ggtccggatt ccgggtcgac cagcgtccg tctagatcgc gagcggcccc 60
cttttttttt ttttttgaaa aagaaaatat gaccgttttc aattttacac ggtaatgtat 120
caccgaaaca agtatacaac attggccaac tggtaatttc cttaccatgt accaacgtat 180
ctcctctcac ccacacacat ctacacaatg agggggcaca gccaaacctt gcattctcagg 240
ggccgaagac acctcgctgc aaagaaggaa tccccagggg gaacgcatga cac 293

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<210> 460
 <211> 498
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-049-Q1-E1-B7

<400> 460

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ggtcattgca attctggaca tagccaagtg cctatatgat gctattgcac ggatggaaag 120
ggcggcgag aaaggaaaag caattgccgc tgccgtcgag ggcgttgaaa agcattgggg 180
agcagctgtg cctggtccta acaattttat tgagacgctt cgagaacgga tgtttaggcc 240
atcgctgtct actattatct ctgagaatcc aaaagttgtc actgttgac catcagacat 300
gggtgtgaca gcatcaaaga agatgctgga attaaaagt agttcagcag ttgtagcaat 360
tgaaaacaaa cctggaggaa ttctgacatc tagagatata ttgatgcgtg ttatcgccca 420
aaatcttcct cctgagtcca ccacggtcga gaaggtcatg actcagagtc ctgaatgtgc 480
cacagtggac accccaat 498

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<210> 461
 <211> 345
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-049-Q1-E1-B8

<400> 461

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tccaggactt tgactcgtgt gaccgtccct tcacccatgc cggcgggtgc cccaacccca 120
tgggtaagtt cgataaggag ctccagccaga tggccaacaa ctgcatggcg cttgcaaaca 180
tgatatgaat catatatatg cggccgggga cagtttgga tgtgcttaca ctctgcgct 240
agcgtgaggt ggcggcgcg cgcattgcaag ggaatgcttg gacatgagga gcacttggtt 300
ttcatttaag aatcanntg aatataatta caattaagtt gaacc 345

<210> 462
<211> 496
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-B9

<400> 462

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gcggcgtggg aaatccgggg aagaagccag tggccgagag acaacagacc gcgtgaggca 120
gcgacagtac gaggcacgcc acctagcctg cagagagggt catctgcaca ccaacagggt 180
ttgcgacaat gtctagacct tcattctaac agatgcaacc ttaaagagtg ctgagattca 240
agaaacactg agcaagatgg gtctcgatgc cgtgggtggc gcctgctacg tctttctagt 300
acttgtctct gtgtcacag ttcgcttctt ctacgtactg tggcacagtg gccaaaccaga 360
gtcaaggttg tgcaccacca gattgcgttg tctcaatgtc cttgggtccg aaaagggtcca 420
gattaccagc tccgggtgat gctgatgagc tatctgtcat tgaagaccaa attgcatgga 480
ttgttcacat aattac 496

<210> 463
<211> 502
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-C1

<400> 463

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ccttttcttg ccacggcaaa acaccttcgc cggcgagagc atggcgatgg cgtaccgtgt 120

cctggagggtc accctggtgt cggcaaata cctcaagaaa gtgtcgctct tctccccggac 180
 tcgcatctac gccgtggctt ccattctcgg attcgacctc cgcattccctt cccacagcac 240
 ccaagcagac cacagcaacg gctgcaaccc ctgctggaac gccgtggtac acttccccat 300
 cccggctgcc gctgacaccc ggggcctcgc actccacgtg aggctccgcg cccagcgtct 360
 atacctgggc gatcgcgaca tcggcgagggt gtttgtgccc atcgacgacc tcttggccgg 420
 cgccgacaag ggtggcgatc cgaggcccgt gagctaccag gtgcgcaggc cgcactctgg 480
 ccgcgcccac ggcgtcctct ac 502

<210> 464

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-C11

<400> 464

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 ccccggttcg agcgctgcta agcaagagag cagcctgcg gcaacgagga ctaggctgta 120
 cctctagagg aactacacag tgctggaacc ttcataatgg agcaagctcg cttacaagct 180
 ataatgggag acttctcgt agacaatctc actacggcca gcactacgca cgtctgcact 240
 cgcgatcatgg gcaccttcgg ttacctaaca ccggagtacg cctccagcgg caagctcacg 300
 gacaagtcgg atgtcttctc cttcggcgtc atgtgctgg agctgctcac tgggcgccgt 360
 cccatcgata ccattaactt cattgaggac agtctcttgg actgggcgcg cccgctgct 419

<210> 465

<211> 210

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-C2

<400> 465

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 aaaaaaaaaa aaggaaaaaa acaaaggag gccgcctaa aagttccaat ctaagctaca 120
 cgtgcatcgc acgttcaata ctcttcaaaa gtgtctccaa acttcatttc agtgaccgtc 180

gttttataac atcgtgacgt gggaaatccc

210

<210> 466

<211> 489

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-C3

<400> 466

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atggtgtgag ccacaccgtc cccatctacg agggatacgc cctccccac gccatccttc 120

gccttgatct ggccgggtcgc gacctcaccg actacctgat gaagatcctg actgagcgcg 180

gctactcctt caccaccacc gctgagcggg aaatcgtgag ggacatgaag gagaagctcg 240

cctacatcgc cctggactac gaccaggaga tggagaccgc caagaccagc tcttccgtgg 300

agaagagcta cgagctcccc gacggacagg tcatcaccat cggcgccgag cgcttccgct 360

gccccgaggt cctcttccag ccacccctca tcgggatgga agctgccggc atccacgaga 420

ccacctacaa ctccatcatg aagtgcgacg tggatattag gaaggacctg tacggcaaca 480

tcgtcctct 489

<210> 467

<211> 138

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-C6

<400> 467

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tatctggatc gaccacctgt ccatgagcag ctgcgcggac gggctggtgg acgcggtgga 120

gtgctccacc gcttgtct 138

<210> 468

<211> 500

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-049-Q1-E1-C7

<400> 468

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gtggccttgc tgagcgtggc cctagtgggc ctgctcctct gccacctcgc caccaccgcc 120
tccgcccacc agaaagacat ccacgtcctc ggcagcgtcg acgggtccag cgacggcagc 180
agccccgagt ccgaaggccg cgtcgtctac gcggacatga agctggctga tacggaatcc 240
gatgcgccgg cgccggcgcc ggcggccggg ccgtcgtccg gttgaactga gaagcgtgcg 300
tccagccaag caaggtggtc aaaaccgaga actaattaag ggctcgatcg tgtgtcaggc 360
tactactgtt cttgccataa ttatatatag atacgcanag tgtggccaag cctaccacaca 420
tgcattgctat tgcattgcctc cgaatatata ttatccgact cgatcctgcc aaattgtntc 480
gtcgacntca tgatatatat 500

<210> 469

<211> 202

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-049-Q1-E1-C8

<400> 469

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ctcgtgtgtc ctctgtatct gcaactgcaa gcaaggaaat taattaaaag aagatcggcg 120
ccatggcggc aacgacgacg gggatgcaga tgatgcaggt gcagcaagcn gcggcggttc 180
tgctgtgctt ggttgtgttt gc 202

<210> 470

<211> 356

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-049-Q1-E1-D1

<400> 470

gggacgaccc acgcgtccgc ggacaagttc gtggcgggtg tgaaggaggc gatcaagaag 60

ccggagatgg acgagaagga ggtggcgatg cggagattcc tgngcagccg ggtgaagaca 120
 gcgatggagc cgcggtcaga gtcggagcag ccgcggcgcc gggaggtggc tcggagcaac 180
 gacgtgatcg aggcggcacg caccaagctg atgcagaagc gccagtgcag caaggtcaag 240
 gcgctcgtcg gcgccttcga gactgtcata gacaccaaga aggacgccgc cgccggcagg 300
 caaaacacat ctacgcaaat taacttaaaa catactgcgg ccggcgggac gcatcg 356

<210> 471
 <211> 466
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-D11

<400> 471

ccacgcgtcc gctcgaggag aagtcgccc agtacgtggc cgtcaagaag gcgtcgtcga 60
 caccgcagaa gagctcctcg tggctcgga ggagggcagg gtcgtcgctt ggtgggcttg 120
 gacacagacg ggccgcttct gccgcgaagg tggacgatct aagcagcaga tccgcggggg 180
 atctggtcat ggtgaacgaa agcaagggcg tctttgggct cacggacctc atgaaggcgg 240
 cggccgaggt gatcgggagc ggtgggctcg ggtcggcata caaggcgggtg atggccaacg 300
 gcgtggccgt cgtggtcaag cgctcccgcg acatgaaccg ggcgaccaag gacgcgttcg 360
 aatccgagat gaagcggctc ggcgccaatg cggatgccaa actgctgccg ccgctggcct 420
 aacactaccg caaagacgag aagctcctgg tctacgagta catccc 466

<210> 472
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-D12

<400> 472

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 ctgttcctgg accccgcgat gcccttctac ggcgtgaagg tcgacgccgt ccacgtggcc 120
 ggccaggccc tcgacatccc cgccgaggtg tgggaccca agagcggcgg cgtgacctc 180
 gactccggca cgaccctcac ggtcctcgcc accccggcgt acaaggccgt ggtcgccgcg 240

ctgaccaagc tcctggccgg ggtccccaaa gtggacttcc ccccgttcga gcactgctac 300
aactggacgg caccgcgacc gggagcgccg gagatcccaa agctggcggg gcagttcacc 360
gggtgcgcgc ggctggagcc accggcgaag agctacgtga tcga 404

<210> 473
<211> 493
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-D3

<400> 473

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cgtgcaggac gcgtgcagca agacacaatt cccaagatc tgcgtggaca gcctcaccgc 120
aaagccagag agccagaagg cgaccccgcg ccggctggcg gagctgttcg tgaacatcgc 180
ggccgagaag ggatccggga tggccacgtt cgtgcacggg aagtacaaca acgccaagga 240
cagcaccgtg ttcaagtget acgacagctg ctccggacgac gtcgaggagg ccgtcgccca 300
cctcaacggc ctcggtccggg agcccaccga cgccaagtgc ctggagctca agtcgtggct 360
ctcctccacg ctccggcgga cctccacctg cgaggacgcc tgcaaggacc tgcccaagaa 420
cggcgacaag gacgacgtcg tcaacttcag cctcgacttc gagaagctgc agcgcgtcac 480
gctggacctc atc 493

<210> 474
<211> 483
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-D6

<400> 474

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cgttctgcca ttatctcttc agtatggctt tccaattgtc cagaaatttt tggagggagc 120
ttccagcatt gacaaccact tctactcatc ttcatttgag aaaaatatac ctgtacttct 180
tggtttgctg agtgtgtgga atgtttcatt tcttggttat ccagctaggg caatattgcc 240
atattctcag gcacttgaga agttggcacc acatatacag cagcttagca tggagagtaa 300

cggaagggt gtttccattg atggcgccca actttccttt gagacaggtg aaattgattt 360
 tggatgaacct ggaactaatg gccagcacag cttctatcaa ttaatccatc aaggaagggt 420
 tatcccttgc gactttattg gtgttggtta aagtcagcag cctgtttact tgaaaaggga 480
 aac 483

<210> 475
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-D7

<400> 475

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 acccgctccg attccatcat caccgcctac cgcgaccact gtacctacct cgcccgcgga 120
 ggggacctcg tctccgcctt ctccgagctg atgggcccgcg agggcggtcg ctcccgcggg 180
 aaggcgcat ccatgcattt ctataagaag gatgccaatt tctacggcgg gcacggcatc 240
 gtcggcgcg aggtgcccct cggatgcggc ctgccttcg ctcagaagta caagaaggag 300
 gagacggcca cgtttgcctt ctatggtgac ggtgcccgtc accagggaca gccctttagg 360
 ctctcacat ttcggcctcc tggaagctgc ccgcaaaatt gggttgcaag aacaaccatt 420
 atggtatggg aacaccggaa tggagggc 448

<210> 476
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-D8

<400> 476

ccacgcgtcc ggcgcagcgc gcagcgcagc ccacctatca ataaccgacg agcgaggcgc 60
 gagaaccgac ttgccaccgg ctgctcgccg tctctctctc tccctcgggg cgcgcgcgcg 120
 ggagacaggc caaccgatcg tcaggcggcc agccatgggc aagcacgggc acggcaagtg 180
 ccacgacgtg gaggcgtgct acccgccggg ggcagcgggc ggcggcaagt acccgtagat 240
 gacggagaac ccgcagctgc ggtgggcctt catccgcaag gtgtacgtga tcgtgtgcct 300

gcagctgctg ctgacggtgg ccgtcgccgc gacggtgaac ctggtgcgcg ccatcgggga 360
 cttcttcttc tcccgcaaca tgggcgccat gttcgccatc atcggcgtca tcgtcgcccc 420
 catcctcgtg atgattccga tg 442

<210> 477

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-D9

<400> 477

cggtcggtgta gtccgggtcg accacgcgtc cggaataacc tgaaaaaggt acaagaaaag 60
 aaaccttaaa cgtgccatgg aacacaccta cccaatgggt tattcttacc atttgaacat 120
 acacgaccat tttctacaca ccacttttga gtgaagattt acaggacaaa ggtggtagac 180
 gactgacatg ttctcagata tgggtaccagg ctagtgggtt gagtacagga tgagtgcac 240
 cggtagtttg tattgtattg tatctcacgt tctttgtact caagaatttt gttggctgta 300
 caggcagaag gcggtgcggg tagcatgcct tgcgtacata attatttgaa tacaagttga 360
 attgaaca 368

<210> 478

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-E10

<400> 478

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 ttcaaggtgg ctgcgtatga cacaaagcaa aagaaaatgg atttctttga tccatcaagg 120
 aaagatgatt tcctgttcat ctctggcaca aagatgcgca ctcttgccaa gaaccgagag 180
 agtcctccag atggttttat gtgcccgggt ggctggaagg tactcgttga atactatgac 240
 agcttggtgc catctgaggg cagcagcaag ctgcgtgaac caattgcagc ctaaaatctg 300
 gaaaatcctt catataagga atgctactat atcttagcaa gcggttcttt gcgacataga 360
 accgatgcta tatgattgta tactggctgt aagactttta aacactaggc ttgattcgga 420

tgттаатггт gtgc

434

<210> 479

<211> 487

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-049-Q1-E1-E11

<400> 479

ggтссгgaaa тсссггггсг acccaccgct ccгсссаагс gtccггггсa atcttgгтаа 60

cagagtттта аггтттссса гсagagaага гсгсгггсaa ccaccacatt catataatta 120

ataagcaagg ттtagагааг аггсaaсatг гсгсacaaага тгаагаaggg gatcctгааг 180

ccгттсггс atatctcaac catcatggat ggтаaggagg ctгaaatгсa aattггггггс 240

ccгacгггatг таaaacacггт гсгсacatatt ггггггггatг gtссггггссс cacгаacaaс 300

aaсaaсaata асaaсagсaa саасaaтaггт гсгсггггссс сtagctггat гаaggattac 360

сactсггсac сгггггггс gtссггггггг аггagггга gtггггггссс ггггггггсa 420

aatсnctггг сттгггсaaгa gatagгсatг gatггггсaa гсггггггга аacггсгггс 480

aaggаа 487

<210> 480

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-E2

<400> 480

ggгtagaccс acгсгггссгс аааacatггс тгггаатгг агаaccatгг гггсгггсат 60

гсггггсacat ггггсгатгг сгггггсгггт гггггггггг gtгagсгггс catггггсгг 120

тсгггггггг gtсссгггсгс гсaaгаacat сacгггсссс tatгггсaaгг actггггггга 180

сггтааагсг асатгггатг гсaaгссгсс гггггссггг ссггсгсгсa acгггггсгг 240

сггсггггггac аaggacггга асaaгссггг сттсaaтaгс atггггсгсат гсггсaaсat 300

ссссатсггс аaggatгггс тггггггггг gtссггггссс гaгatсaaгт гсггaaгсс 360

тггггггггс тсгггсaaгс ссггггггггт гсacatсacг гacatгаact atгagссгт 420

cgcggcgtac cacttcgatt t

441

<210> 481

<211> 508

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-E3

<400> 481

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caaccctaga aagctagaca ccgtacccat ggctcgcgct agcgtcgtct ttgtcattgc 120

cgctctcctc ttcgtcgcca tggctgtagc accgatggcc gaggcaaagt ccgccgatgc 180

ccctgtggct gacgcgccag ccgatggacc tagcgggccg gctgctgcac ctggccccc 240

gggtgtcgaa ggctgtcag gcaatgagga tgacgatgat gactccacca attgaggcca 300

cacacgtcgg cccggttaaa tttggaacaa gacatggaag aaaattgaga gcaatgtctt 360

aaaaacaatg ataaggtgtg gtcatcaact catcaatgga tacatccttg ctctccctct 420

tttcctttcg gtttgatttc caatgtgtaa ccatgttgta agttaacggt atcgactcat 480

ggatcagga tctaaaaaat tctcgttc 508

<210> 482

<211> 180

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-E6

<400> 482

ggtcgaccca cgcacccgca caatctgggt ctcatgaca cactctgcat ctgaaaggac 60

cgatgcacat gtaaagatga aggtatgtgc tcatgctgtg ctagtgaaag ccttaaattc 120

agtgttctgt tgtctctctg gtggcgctact gtcactgttg actggcctac ggatctgagt 180

<210> 483

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-E8

<400> 483

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ttttcttgcc acggcaaaac accttcgccg gcgagagcat ggcgatggcg taccgtgtcc 120
tggagggtcac cctggtgtcg gcaaagtacc tcaagaaagt gtcgctcttc tcccggactc 180
gcatctacgc cgtgggttcc atctccggat tcgacctccg catcccttcc cacagcacc 240
aagcagacca cagcaacggc tgcaaccct gctggaacgc cgtggtacac ttccccatcc 300
cggtgccgc tgacaccgc ggctcgcac tccacgtgag gctccgcgcc cagcgtctat 360
acctgggcga ttgcgacatc ggcgaagtgt ttg 393

<210> 484

<211> 501

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-049-Q1-E1-E9

<400> 484

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gcgtcgattt aatgtgcggc tatggaaggt cttcacagaa tgttttaaca ctctacctgt 120
ggctgctctt atcgatgata aaatattatg tatgcacggc ggactctctc ctgatctagc 180
acacttggat gagataaaga acttgcagcg tccaactgat gtaccagatc aaggtctact 240
gtgtgacttg ctttggtcag atccaggaaa agatgctcaa ggggtggggca tgaatgatag 300
aggggtctca tatacctttg gtgctgacaa ggtttcagaa ttcttgcaaa agcatgatct 360
tgatcttata tgctgtgctc accaggttgt cgaggatggg tatgaatttt ttgctgacag 420
acagcttgtc accatattct cgcccccaa ttattgtggt gaatttgata atgctggtgc 480
aatgatgagt gtccatgaaa c 501

<210> 485

<211> 487

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-F10

<400> 485

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gctacaccga ggcttagtga agacaagggtg aggcaatgcg tcgatccaag gctcggagac 180

gaataccctc caaaggctgt agccaagatg gctgctgtgg ccgccctctg cgtgcaatac 240

gaggggtgaat tccgtcccaa catgagcatc gtcgtcaagg ctctgaaccc cttgctgcac 300

agccggtctg gcaaccgccc tactgcctcg tcggcctccc acgctgccga gcgatccgga 360

ctgtgatttc tcatcgctgc gacaactttg ggttcacgaa aaaggaccgt cttgtggagc 420

gttggtgttg ctgtgtcgtg actgccaaag cttggcgca gagaagagct ttgccatgca 480

gctgtgt 487

<210> 486

<211> 155

<212> DNA

<213> Zea mays

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<400> 486

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aaaagaaaaa aaaaaaaaaa gataaaaaaa aaaaaaata ataaaaaaaa aaataggggg 120

ggtcgtacta agggttcaag ttttttttca ggggg 155

<210> 487

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-F12

<400> 487

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cataccctgc aggacgtgta cgactcgctg gacgtgcacg tcggccactg cctctccgtg 180

ctggtcgacg ccgaccaggc gcccggcgac tactacatgg tggcctccac gcggttcac 240

cacgacgcca agtccgcctc cgccgtcatc cgctacgccg gctccagcgg cgccccgccg 300
 gcgccaaca tgaccgagcc accggccggc tgggcctggt ccatcaacca ggccaggtcg 360
 ttccgctgga acctgacggc cagcgccggc cgccccaacc cgcagggctc ctaccactac 420
 ggccagatta acatcacccg caccatc 447

<210> 488
 <211> 423
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-049-Q1-E1-F2
 <400> 488

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 aggggcaggc cccagctgag gccgcgtct ccacacccaa ggttgcgccc gagggcactc 180
 caatctccgt tgagggtgcg gctgatgaac aggtagctga gaagggtggtg gtggaggagc 240
 cggctgcggc ggccgacgtt gagcatcaga aggctaata ggtggtcgct ccagaggcgg 300
 ccgtcgccga gcccgatcac aaggaggang aagccgtgga gaagaccgtc gtcgaggang 360
 agaagccagc ggcagccgcc aatgcagang aaaaggtcgc caccgccgcc gagaacacga 420
 cga 423

<210> 489
 <211> 492
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-049-Q1-E1-F3
 <400> 489

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 caggcgcggt ggccgggcgg gtgcggcctc ctgccccgac ctcggtcggc cgcgcgagg 180
 cgcctggcag cccccagcct cggcctcggc caggcgcgcg cgacccccag ccccggtcgg 240
 ccggctcgcc ggtcatggtg gctccgatcc gggctcctcc ggcattgggca ggcgcggggtt 300

ggagcttgcg cattcctggg tctggtttgc gccacgattc agcctcgccg gttgattgct 300
tgctgtagca t 311

<210> 492
<211> 475
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-F6

<400> 492

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cgccgcgcca tcggcttcaa ggacgccgtc accatccgcg ccaccatggg catggcgcg 180
caggacatgc agaactgcga cgagcagttc aggcagatcg gcgagaagaa ccccatggag 240
cagttcgacg cgtcgctcgt cgagatgtcc gagaactgcc gtcgctctc caacatgac 300
tgatcgatct ccttctccac ggacgacaac agagagccgg gcgttttggg cctcgcac 360
gtttgtcgcc gctgctaacg ttcgcatgcc catgcccgcg agcgcgctct cgcgcgacaa 420
taactgatga gttaagtttg ttttgctttg accatctcac atcgtaatt cctgg 475

<210> 493
<211> 515
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-F7

<400> 493

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tgagccggca cacgatccag gtgtaccgcg ggtcatggac ggcaatcatg ctgacgttcg 180
acaacgcggg catgtggagc gtgcattcca acatctggga gcggtactac ctcggggagc 240
agttctacat cagcgtcgtc tcgccggcgc gatcactgcg cgacgagtac aacatgcccg 300
acaacgccct ccgctgcggc aaggtcgtgg ggctgccgct gccgccgtcc tacgcccccg 360
cgcgctaaga cgacgaaggc ctcgttttct cctcgtggtc tgaccatcca atccaaactc 420

aaaagaacaa atacgaaaga agcgtagtga aggggaacaa atgaatggat atatgtaatc 480
 ttgagatgca tgccctctca aatcactgta ctggg 515

<210> 494
 <211> 405
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-049-Q1-E1-F8

<400> 494

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 acatcagcca tgggcgctg cgcaaccaag cccaagacgc ttgaggggca ggccccagct 120
 gaggccgccc tctccacacc caagggttgcg cccgaggcca ctccaatctc cgttgaggtt 180
 gcggtgatg aacaggtagc tgagaaggtg gtggtggagg agccggctgc ggcgccgac 240
 gttgagcatc agaaggctaa tgaggtggtc gtcacagagg cggccgtcgc cgagcccgat 300
 cacaaggagg aggaagccgt ggagaagacc gtcgtcgang acgagaagcc agcggcagcc 360
 gccaatgcag aggaaaaggt cgccaccgcc gccgaaaaca cgacg 405

<210> 495
 <211> 481
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-F9

<400> 495

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 gtaaacatta cattgccatc catattctag gatggtattt tttgtagctt cagtgtcatt 120
 cttttgttaa tatgatgat tgtttttgtg tatgttacct ccttcctcga ctatatgctc 180
 ccccggtgctg aattgcaaca cacacacgca cccacacca cactggccgc aacgattaaa 240
 aaagcatcct gcgaagccta gtcagcagtt accgcctctt gggaagctga aatgtgcgct 300
 tcaggaagtg gctggcgacc tcgtcgtcgc gatggcacag cacgcgcagg atggtgtttg 360
 gctcactgcg gctccaccgc ctggtcgtcg gcggcaacgg taggcgctgc ctctcggaga 420
 ccgcctcggg gcactcgtac gccgcgatgc caaactcctc cacgagctgc tccgccgtta 480

g

481

<210> 496
 <211> 481
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-049-Q1-E1-G10

 <400> 496

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 gggccgccag caggttcagc cgttcctgtt cttgctaaaa cgagagaagg atggcagtgt 120
 ctccaggagc tgtcctattc ttgtttctcc tcgtcgcagc agaggtggga accatcgatg 180
 ccaaaatggg agtagccatg cccatgcatg ccttgataat ggagaaagcg aaacagcagg 240
 agacggagaa gaaggaggag aaaagcacgg agaaggaaga gagtcaatgc ttatcgccga 300
 gtctccagtt cgaggggttc tgcttcaaca gcgacagatg cgccgatgtg tgcataaagg 360
 agagctttcc cgggtggcgag tgcaagcagg tcgtggccac gcgcaagtgc ttctgcaaga 420
 agccttgcta gttcatcggt cttgctaatt gttgatgggt gcttcattaa tttgatttga 480
 t 481

<210> 497
 <211> 490
 <212> DNA
 <213> Zea mays

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<223> Clone ID: LIB148-049-Q1-E1-G2

<400> 498

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ttttt 485

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<211> 183
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-G3

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<210> 500
<211> 472

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
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 <211> 395
 <212> DNA
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 <223> Clone ID: LIB148-049-Q1-E1-G5

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<210> 502
 <211> 508
 <212> DNA
 <213> Zea mays

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<213> Zea mays

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 <213> Zea mays
 <223> Clone ID: LIB148-041-Q1-E1-G5
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<210> 505
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<210> 507

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-H2

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<210> 508

<211> 428

<212> DNA

<213> Zea mays

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 <212> DNA
 <213> Zea mays
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<210> 510
 <211> 419
 <212> DNA
 <213> Zea mays
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<211> 426
<212> DNA
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<223> Clone ID: LIB148-042-Q1-E1-A1

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<212> DNA
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gccagccggc cggggatcag cgacgtcgtc gcggcgctct ccttcctcgc cgacccgcaa 180
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<210> 513
<211> 208

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-042-Q1-E1-A12

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<210> 514
 <211> 386
 <212> DNA
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 <223> Clone ID: LIB148-042-Q1-E1-A2

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<210> 515
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-042-Q1-E1-A4

 <400> 515

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<210> 516
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-A5

<400> 516

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<223> Clone ID: LIB148-042-Q1-E1-A6

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<223> Clone ID: LIB148-042-Q1-E1-A7

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<210> 519
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<212> DNA
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<223> Clone ID: LIB148-042-Q1-E1-A8

<400> 519

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aacgacagca atggcagtag tttttttctt ttcttttttg ggtgtgtatg tgtaattgtg 180
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gacgacgacg tcaatgtatg gtgtgcgac ggtggagcca ggctgcgtga cctggcaggc 300
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<210> 520
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 cgctagtttg tgccccgctg atagcagagg caaagaagaa gagagtcgcc gccgccgccg 180
 ccgaggagaa gaaggtgcag gacaacttct gctcgac 217

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 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-042-Q1-E1-B1
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 <223> Clone ID: LIB148-042-Q1-E1-B11
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 ggacgctagt gattacttat ggtacaccac aagctttcgc ttggagtcgg acgatttgcc 180
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 <212> DNA
 <213> Zea mays
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 cgagaccccc ctcaagctcg ccgagtactt caacgtcacc gacgggggtgt tcagctacaa 180
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-B2

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 cccccggacc agcagcgtct gatcttcgcc ggcaaacagc tggaggatgg ccgcacccta 180
 gcagactaca acatccaaaa ggagagcacc ctccaccttg tgctccgtct ccgtgggtgt 240
 cagtaagtca tgggtcgttt aagctgccga tgtgcctgcg tcgtctggtg ccctctccat 300
 atggaggttg tcgaagtatc tgctgttcgt gtcagtgttg gtttaataat ggaccggttg 360
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 ttaaag 426

<210> 525
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-B3

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 gttgggtttg tcgtcaccgg ccgcatctac tgcgacaact gccgcgccgg gttcgagaca 180
 aacgtgtccc acgccatcca aggcgcgacg gtggagatgg agtgccgcca cttcgagtcg 240
 cagcaggtcc acgacaaggc ggaggcgacg acgggccccg gcggctggta caggatggag 300

atcagcggcg accaccagga cgagatctgc gacgtgccc tgctcaagag ccccgaggcg 360
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<210> 526
<211> 370
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-B5

<400> 526

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gccctgcccc gcttgcgcg gctggcgggc cagcatcgcc gccacgcccc gcgccgcggc 180
ggcgcgaccc agccagcggc gcaggccgcc gactgccgaa cggcgcgccg gcaagcctgc 240
atgcgccacg ttcacgaagc gcttgccggc ctcagacatg gttcgtctgc ggcagcacgg 300
tcaaggccac cagggccagc acgcgggcgc ccacaggat acagcgccg cgccaaggcc 360
acgccggtgg 370

<210> 527
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-B6

<400> 527

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cgagctaccc gaccgcgcgt caccgttcag ctccaacacg gcgcaccacc ccgtctcgt 120
gcccaccaca cctaggttgt ccttatcgctg ctcgtcgctt gccacatgg tgaccccgcc 180
caccgacaca ccgccgatca cggccacca gaagcaggac gacaagccga agccgacgcc 240
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cgctgccgcg gctttccgcc gcatcaggt 329

<210> 528
<211> 416

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-B8

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 acggaggacg acggtgtgcc taggcctgct gcttctacta ctggcggcgt cgactgcgac 180
 ggcacatttc tcgatcggcg acgtggacga gtacttgaac aggcgcacgc aggagtccccg 240
 ccacaggaac caccggcggcg cgcagatcaa tgacctatc tccagtgtg cgcgcttcca 300
 cgccaacgtg gatgcacgcg cgtatggctg ccgctccaac ctgcagctgc aggaggagga 360
 agcagcagct accgcggggc gtgtaaccqa agcagaagaa caggaggctt ctactc 416

<210> 529
 <211> 220
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-B9

<400> 529

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 tgggtccttc gacatcacca agttggggcg ctccggcaat ggcaagacag acagcacgaa 180
 ggctgtgcag gaggcattgg catcggcgtg cggcggcact 220

<210> 530
 <211> 208
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C12

<400> 530

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 cctattgctt caccatctcc accaccacca gcgccagtgg tctcaccacc accgcccgtg 180

aatcacctc cccacccgc gccagtgg

208

<210> 531

<211> 426

<212> DNA

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<223> unsure at all n locations

<223> Clone ID: LIB148-042-Q1-E1-C2

<400> 531

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ggcgcgtggt acacgacaac cacggcaagt tcacggccgg gccgtggaaa cccgcccacg 180

caaccttcta cggcggggcg gacgggtccg gcaccacggc gggcgcgtgc ggggtacaagg 240

acacgcgcac gcaggggtac ggcgtgcaga cgggtggccg gagcactgtg ctgttcgggtg 300

acggcgcggc ctgcggaggg tgctacgagg tgcggtgcgt ggacagccct agcgggtgca 360

agcccgcgcg ggcagcgtg gtggtgacng tgaccgacct gtgcccgcgc aaggaccaat 420

ggtgca 426

<210> 532

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C3

<400> 532

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tagagatgct ggccgacaag cccacgtact ccacgttctt gaagctcctg caggacacca 180

aggtcgccgg cgaggcgaat cagctccggg cggcgacgct actggtcgtc cccgacaaac 240

ttgccaagcc tctgggggtcg ctgcccgcgc ataaggtgcg ggcggcggtg gagaaccacg 300

tcctttctca ttacttcgac cccatcaagc tggacgagat gaagacacgc accgccatcc 360

tccccacgct gctctccgtc accgaaaaga aaactcggcg tcctcaacta cacca 415

<210> 533
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C4

<400> 533

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tgtacgcca ctgggagttc tgcaagatgc aaggcatcgg ctggggctgg ggcggcgcca   180
tctgggctgt cagcgtcgtc acctacttcc cgctggacgt gctcaagttc gccatccgct   240
acgcgtcttc cggcaaggcc tggaacaaca tcaacaaca gacggccttc accaaccgca   300
ccgactacgg caagggcgag cgacaggcgc agtggggcac ggcacagagg acgctgcacg   360
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<210> 534
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C5

<400> 534

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tagatggaca ctacgacgag aagaggaaat ccaatgtgga atacacagag gacgagaaga   180
aagccgtgat cgcggctctg aaaaagaagg ctttgagcgc ctcacagaag tttaggcatt   240
ccatgaagag ggggaggaag agcagcaagg tgatgtccat ctcgattctg gatgagcgtg   300
aacctgagga ggtgcaggct gtggatgcct tccgccagct tcttgactt gaagagctgc   360
taccatcgca gcatgatgac taccacatga tgctaagatt tctcaaggca agaaagtttg   420
atatcg                                           426
  
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<210> 535
 <211> 431
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C6

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gagaatcccc tcgaatcccc ctctcaacca agggcgcgcg cgcgtgcgta tgctctctcc 180
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cattgatttc tggtataatt actaccgagc tactatctcc acattattat tggtaaagaa 360
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<210> 536

<211> 286

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C7

<400> 536

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ataaacgatg actgaatgag ccaggcgtgt gtgtttttat aagctgagac gtaggaaaat 180
gtacaagatc ccatagaggg gtgcctgatc aagggttgga gcttgcatcg gaagtggcag 240
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<210> 537

<211> 334

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D1

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atccatcggc gcggcggtccc aagactgcga ccac 334

<210> 538
<211> 219
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D10

<400> 538

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catgggttgc ggtgggtcca aggaggccgt ggccaccggc aacaccagcg ccggcagcaa 180
ggtcctccgg aggaagtct cctccgtctc caccggcgc 219

<210> 539
<211> 214
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D11

<400> 539

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tcatgcacaa cctgcggcag tacgagcggc cgttgcaccg ctacatcgcc atgatggacc 180
tgcaggagcg caacgagagg ctcttctaca agct 214

<210> 540
<211> 236
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D3

<400> 540

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cgctgatgag gtgcaaccag ggatctgtct tctccaact gttgtagaag ggggccggtg 180
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<210> 541

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D4

<400> 541

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<210> 542

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D5

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cccgccacag gaacaacggg ggcgcgggca tcgatgacct catctccagt gcggcgcgct 300

tccacgccaa cgtggatgca cgcgcctatg gccgtagatt cgacctgc

348

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<212> DNA

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<223> Clone ID: LIB148-042-Q1-E1-D6

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aactaggagg aatggaccgc caccaatata tatcacacac acacacacac actcacacat 180
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cagatgcctt cgttacgtct gattaggctc atgacaatgg cgattttggc atggagttgt 360
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<210> 544

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D7

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gcggtacaag gacgagaagg acgtcacgga catcaacgtc aaggattgca ctcttaagaa 300
gacgatgttc ggcgtccgca tcaacgcgta cgaggacgcc gcctccgtgc tcaccgtctc 360
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<210> 545

<211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-042-Q1-E1-D8

 <400> 545

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<210> 546
 <211> 214
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-042-Q1-E1-E10

 <400> 546

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 acatcgcggg cgccaagggtg aggctggagt gcaagcactt cggcaccggc aagctcgagc 180
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<210> 547
 <211> 214
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-042-Q1-E1-E12

 <400> 547

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ggcctggtgg gtccttcgac atcaccaagt tgggcgcctc cggcaatggc aagacagaca 180
gcacgaaggc tgtgcaggag gcatgggcat cggc 214

<210> 548
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-E5

<400> 548

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ggaggccgtg gccaccggca acaccagcgc cggcagcaag gtcctccgga ggaagtcctc 180
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agagga 366

<210> 549
<211> 427
<212> DNA
<213> Zea mays

<223> unsure at all n locations
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<400> 549

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ggcagtgtct cagggagctg tcctattctt gtttctctc gtcgcagcag aggtgggaac 180
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atcgccgagt ctccagttcg agggcttctg cttcaacagc gacagatgcg ccgatgtgtg 360
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ctgcaag

427

<210> 550

<211> 420

<212> DNA

<213> Zea mays

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ttggtatcgc tgatgtacca gtttaatttg gtgccccgtt atttgttctt tccttcgaga 180

gagggatcga cacctgtacc attgcttgcc atttgctctgg accagttcaa caattcaatt 240

taaccatcgc gtaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaaa aaaaggaaga aaaaacaaaa agataaaaaa taaaaataaa cataaaaaaa 360

aaaaaaagggg cggcccccca aagggttcaa actttaattc ccggtgcatc gaaattaaaa 420

<210> 551

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-F1

<400> 551

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ctccaagttc ttccacatga acatgtaccg gtgcaaggac atgctgatca aggacgtgac 120

cgtgacggcg cccgggggaca gcccacacac ggatggcatc cacatgggcg actcatccgg 180

gatcacgac accaacaccg tcattggcgt cggtgacgac tgcacttcca tcggcccccg 240

gacctccaag gtgaacatca ccggcgtgac ctgcggccct ggccacggca tcagcatcgg 300

cagcctaggg cgggtacaagg acgagaagga cgtcacggac atcaacgtca aggattgcac 360

tcttaagaag acgatgttcg gcgtccgcat caaggcgtac gaggacgccg cctccgtgct 420

caccgtctcc a 431

<210> 552

<211> 208
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-042-Q1-E1-F10

 <400> 552

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 tcctggcctt cgcggcgcgc gacgccgccg tggccgcggg cctcccata tacgaggtcg 120
 ctgctgggcg gcgcgaacgt atgcgctcga gcatggatga cgtcccgggc aacttctccg 180
 tgccggggcga gtaggtgccg cgcctcac 208

<210> 553
 <211> 214
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-042-Q1-E1-F11

 <400> 553

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 cgtccgtccc tctcctcgtc tccgcctccc cggactccgt cagggaggga gggaggtgaa 120
 cgggccgggg agagagatgg ggccggactc gtcgcccaag aagttgagcc tcaaggagca 180
 gcgcgctgcc tacctccagt ggttcgccct cgcc 214

<210> 554
 <211> 216
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-042-Q1-E1-F12

 <400> 554

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 catccgttga tccatcttgc taataaccct gcgtgccctt cgttctcgtc tcgatcccg 120
 cgacgtccc ttcggctccg gcaaaccaca tcaagtcgag atggagatga agaaggtcgc 180
 ctgcgccgtc ctgcgccg ccgcctccgc caccgt 216

<210> 555

<211> 389
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-042-Q1-E1-F3

<400> 555

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 gccactccaa tctccgttga agttgctggc gatgaacagg taactgagaa ggtggtggtg 180
 gaggagccgg ctgcggcgcc cgacgttgag catcagaagg ctaatgaggt ggtcgctcca 240
 gaggcggccg tcgcccagcc cgatcacaag gaggaggaag ccgtggagaa gaccgtcgtc 300
 gaggaggaga agccagcggc agccgccaat gcagangaaa aggtcgccac cgccgccgag 360
 accacgacga cngtggangc gaagaagaa 389

<210> 556
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-F4

<400> 556

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 caacacggac ggcattccaca tcggcgactc cagcaacgtg accatcagca gcaccaccat 120
 cggcgtcgcc gacgaactgca tctccatcgg ccccgaggc aagatgatcc gcatccatgg 180
 cgtcaagtgc ggcccaggcc acggcatcag cgtcggcagc ctggggcgct acaaggacga 240
 gaaggacgtg gaagacgtgc aggtgacggg gtgcacgatc gccggcacca cgaacggcct 300
 gcgcatcaag tcgtacgagg actccaagtc gtcgtcaag gccagcaagt tcctgtacga 360
 gggcatcacc atggacaatg tctcctacc catcatcatc gaccagaagt actgccccaa 420
 caacatctgc gtcaag 436

<210> 557
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-F6

<400> 557

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agtgtcgcg gaggaagccg atccgcgggc actgccggca cagtggacca ccgcgaagaa 180
gtacaaggcc acgatggacg ccaagacgcg gcaggctttc gacggcgtgg tggccgccgc 240
tacggcagag aagcgggtccc aggcgggtgga ggccgtgctg cagcagcagc tgaacatgga 300
cgtgtccctg tccaaggcga cgtcttccgg ggacgagaac aactacgtga gcgtggccgc 360
cgcttacgag aaggccgcgg gcgcgcgtcat cgcggcgacg ccggacaaca agctccgcgc 420
atggcgttcc cgttcgac 438

<210> 558

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-F7

<400> 558

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cacacaccgt ctccgcccgc ccgcgcgac gcgccatggc tatggctcgc tccgtcgcgc 120
acctcttctt tcccatcctc cttatctcca ccgcgcccgc cgtgcggggc atcaccgacg 180
ccgccggcgg ccccggtatac ctccaggagg cgtgcaacaa gacgctgttc cccaagggtgt 240
gcatgcacgc gctcaaggac aaccagagt gccaggcgga gacggcggtc acgccgcgcc 300
ggctggccga gctgctcgtg tacgtgtcgg ccgaggtggg catgaccgtg gccgcgttcg 360
cgcaccacga gctcaacgcc atcaatgacg acgacgtcct gtacaagtgc atcgacacct 420
gctccgagga catccaagaa g 441

<210> 559

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-F8

<400> 559

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gaatacatgg agtgtaatct ctaccaactt atgaaggata aggtcaagcc tttctcggag 180
tctgaagtcc gcaactgggtg ctttcagata tttcaggctc ttgcttacat gcatcagagg 240
ggctactttc atcgtgacct caaacctgag aatctgttgg ttagcaaaga tgtcataaag 300
ctagcagact ttggtcttgc aagggaagtt tcatctttgc cgccatatac agaatatgtc 360
tcaactcgct ggtatcgggc accagaagta ttgctccagt catctgctta tg 412

<210> 560

<211> 222

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-F9

<400> 560

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gcctccaggt cctccatcct acttgcaacg gcgatgctgg ttgcgctgtt tgcggttggg 120
ttgtgcacca ccccgctcac cttccaggtt ggcaagggat ccaagcctgg ccacctgac 180
ctcaccacca atgttgcaac catatctgac gtggagatca aa 222

<210> 561

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-F11

<400> 561

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gtcctcgtgg ccacggccat agccgccgct cccggcggtg ggtttgtcgt cagggggccgc 120
atctactgcg acaactgccg cgccgggttc gagacaaacg tgtcccacgc catccaaggc 180
gcgacggtgg agatggagtg ccgccacttc gagtcgcagc aggtccacga caaggcggag 240
gcgacgacgg gccccggcgg ctggtacagg atggagatca gcggcgacca ccaggacgag 300

atctgcgacg tgcgcctgct caagagcccc gagggcgact gcgccgagat cgaccactcc 360
cgcgaccgc 369

<210> 562
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-F12

<400> 562

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ggcgcaatct ggcaccggcc atcacgttcc ctccggccgc ttccccctcc ctgccctccc 120
tttccccaga tgggaagcca ttaaaaccag cggatctcac ctcggggcgc gtccgcggca 180
tctgggcaag cgagtggtag agccagcagc catgagatgg tatgcatcgg tagcctcctg 240
agggcgctgg tcctgagtgc ggcggcgtct gcgggcaggc gccggggggcc caggatcctg 300
tgtggccacg aggcggatgt acgcgtgact cctcggcacg gacacggctg gcgcggattc 360
cgggcagtca cggaaggat gatgctggac t 391

<210> 563
<211> 445
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-F3

<400> 563

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gcggcggcgc agaacctgac ggcgagcagc gcggcgcggc gagcgtgga gtcgacgtcg 180
gcggagctgc ccgcggcgcg gaagctggac gccaaaggagg agctggagaa gctgaacgag 240
gccccggcgt cgatgacgct gttcgacttc atgggctggc acttcgacca ggacgagctg 300
atgaagcgca gggaggacgg cacactggac gcggacgggg aggccatgct cctcaagaag 360
gcgcctagca tggcccccaa gaagttctcc tacgtcgaca gcctctctc cggcggcatg 420
aggagcccct ccgcgcgcca ctgat 445

<210> 564
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-F4

<400> 564

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acctgggggg cgtcaccgcc gccccgctc ggcccacgct ccgcctcatg aagcagaacc 120
tcgcgttcct ctcgagcggg gtcaccgagc aggcccagct gccggccgtg ctcgaggtga 180
tgagggcctc cgtggaggcc ttctgacgg tcgtcctcgc tggcggcagc gggcgggcct 240
tcgcccgcgg ggaccacgcc gccgtggccg cggacttcgc gagcttgaag cgcctgttct 300
gcagtttcgg ggtcggggag gaggcggtcg agagggagac ggtgcgggag gaaggggtgc 360
tggcgctcat ggccgttccg acggaacagc tcattccatga gttgctcggc cactatgctt 420
ccactccgat gagag 435
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<210> 565
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-F5

<400> 565

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agtggatgat ggaggtgtgg atcactcggg acggcctctt tcgaggctcc ggagaaaatg 120
atattgtgaag acgacacgta tctaagaaa caagctttgt ttgatgggga aacacaatta 180
gctggagacg agcattctca gtcacagaaa atttcccgtg gccggattga acatcctcac 240
gtgtcacctc ttcacgagga acttatcccc acttcaattc atacccttgg atcaccttat 300
tcttgtgatg tcccgatggg tgaagaggcc atagacgcca tctgcaagag ccacggaaca 360
ccaccagatg agaagattgc catcacaaa gctattataa atgtatcgaa tgga 414
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<210> 566
 <211> 411

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-F6

 <400> 566

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 tggcaaggga tccaagcctg gccacctgat cctcaccccc aatgttgcaa ccatatctga 120
 cgtggagatg aaagagcacg ggggcgatga cttctccttt acgctcaagg agggcccgac 180
 cggcacctgg acgctcgaca ccaaggcccc gctcaagtac cccctttgca tccgctttgc 240
 tgtcaagtcc ggtggctacc gcatcgccga cgacgtcatc cccgccgatt tcaaggccgg 300
 catcacctac aagaccacac tcagcatcta atcagcctct gatgatgaat tatatttcaa 360
 aagagctcac ctggcgctca cgttagcaag acaatatttt ttctatgggt a 411

<210> 567
 <211> 187
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-034-Q1-E1-G10

 <400> 567

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 tcgtgtcatt aagctagatt acaagcagag cgaaagcaag tgtgctcttt tttagggctcg 120
 gggtaattan cccccgggtt ctcatgctcg ggtttggttt actggtttga ctgttgcgta 180
 acatttc 187

<210> 568
 <211> 371
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-G11

 <400> 568

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 ggttccagcc ggccgtcatc ctgcttctcc tgctcattgt gtccaccgat atggcacagg 120

caagggaatg cgagaagtac agtgagcgat ttgttggggc atgcatgata gcagacaact 180
 gcgccaatgt gtgccgcggt gagggcttct tggccggcag gtgcagcacc ttccgcccgc 240
 gctgcatctg cactaggcag tgctaaacaa gatcgctcga tcgttcgccca tgcacgcaca 300
 acctattctt aataacgttc attatctcgt tcttatttat gacgaatgtc atgtatgttc 360
 tgggtgactgt c 371

<210> 569
 <211> 152
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-G4

<400> 569

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 aaagggcgga cgcacaaaaa agatcaaaaa cttaaataaa catgcatgca aaaatcaata 120
 actcttcggt aggggtcacc tatcattcaa tt 152

<210> 570
 <211> 197
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-G5

<400> 570

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 caagaacttc tagggtcgga tcggggagct gagccgcgcc cttctttata tgtagatata 120
 tgcataaagc ggattatatt ggactgttgt actgtgtact accttgttta ttccatgatt 180
 aacatattgt tatattg 197

<210> 571
 <211> 363
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-034-Q1-E1-H1

<400> 571

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 gtgatgactg tcacgatggg catgatgagg agccgtccca agctcgatcat gttgtcgggt 120
 cggagattct tgancttggg attgtatcgc actcagtgat catccggcta tctttgggcg 180
 tctcacagaa tccttgcacc atcaaacctc taagtgtgc tctctccttc caccagtttt 240
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 tccttatggc tttcttcttc gctatcaaaa gacctgctgg gattaccgtg gggctctggta 360
 tcg 363

<210> 572
 <211> 347
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-H11
 <400> 572

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 gcggttggtg ggcgtgtccg tcgcggcgaa catctcgggc ggccacctga acccgccgt 180
 gacgttcggg ctggccgtgg gcggccacat caccatcctg acgggcgtct tctactgggt 240
 ggcccagctg ctgggcgcca ccgtggcgtg cctgtctctc gggttcgtca cccacggcaa 300
 gcccattccc acgcacgccg tcgcgggcat cagcgagctg gagggcg 347

<210> 573
 <211> 317
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-H3
 <400> 573

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 ggagggcccc agctgaggcc accatctcca caccaaggt tgcacctgag accactacca 180
 tccacattga ggttgcggca aaacatgcag tagttcagaa ggtggaggag gacaaggagg 240

aggcactaac agtggcggcg aaacaagagc cagcagccac cattgagcct cagcagattg 300
ctagtcaggt gaccact 317

<210> 574
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-H4

<400> 574

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gtggacggca aggagcgggt cggtttcaac ggcgtgtcgc acgtcgacc cgagaccgc 120
gtcgggctcg ccgagtactt caacaccacc gacgggggtgt tccagtacga catcatcggc 180
gacgtgccgc cctccaagtc cgcgcccacc aagatggccc ccaacgtcat ccgcgccgag 240
ttccgcacct tcatcgaggt ggtcttcgag aaccccgaga agagcatcga caccatccac 300
atcgacggct acgccttctt cgccgtcggc atgggcccgg gcaaattggac gccagcgtcc 360
cggagcacgt acaacctcct ggacacgggt agccggcaca cgatccaggt gtacc 415

<210> 575
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-H5

<400> 575

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cggcggcggc aaaaagaagc cccacgtcaa ccacggcaag tttaaggcgg agccgtggac 180
ggacgggcac gcgacgtact acggcgggcg cgacgggtta actgacacca cggacggcgg 240
cgcgtgcggc tacaagggcg agctggggaa agactacggc accctgacgg cggccgtggg 300
cccgtcgtg tacaccaacg gcaccgggtg cggcgcgtgc tatgagctca agggcccca 360
gggcaccgtg gtggtgacgg ccaccaacga ggccccgccg cc 402

<210> 576
 <211> 364
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-A1

 <400> 576

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 gctgctctgc ctgtaccacc tccttttctt ctccctgtcc gtcccgacc cggcagcagc 180
 agcagcagcc gtcccccgcc gcgcgggtgg ccaccgtggc agcaacgttc cgtccgggtc 240
 aggaaccgcc aacgtcgtcc tccgcttcgg cctgtccggg cagccgctcc gcctccacga 300
 ccccgccgcc gccgcggggc tcccgacat cgacaccttc cgcggcaagc tcgagcgggt 360
 gctt 364

<210> 577
 <211> 340
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-A12

 <400> 577

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 tcgacccggt gtcgaagcag gcctccgaga aggaggcggg cccaacatc tccgtcaagg 180
 gctacgacgt gatcgaggag atcaagacgg agctggagag ggagtgcccc agcgtggtgt 240
 cgtgcgcgga catcatctcg gtgagcgccc gcgactcggg gaagctgtcg ggagggcccg 300
 aatacgcggt gtccttggg cggcgcgact cgctcgtgtc 340

<210> 578
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-A2

 <400> 578

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 ctgtggcagc agaagttttc ccaggcgatg cagaaggctc ggatgcttga cgtgctaata 180
 ggcgagggca agggccaggt aaggaagcag tgccgcctgg tgaacgggca ggagaaggag 240
 cagaagcagc agcagccacc ggaggagcag gaggagcagc agccaccgga gctggaggag 300
 gaggagcagc aacagccgca tcagccacag cttccatggt tctgcagag gcagcgcccg 360
 cccgttcttc ttccatgggt ccggccccat ccacggccgc gtcgaccgtt ccggaaacat 420
 ccggtggccg acctgggtaa cggattt 447

<210> 579
 <211> 152
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-A4
 <400> 579

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 tgtggcggca ggcgtttgca caggcgatgc ag 152

<210> 580
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-A5
 <400> 580

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 tcccagaaca gacagttttt tgacttggga aagcctggag tcagtgcgta taaacaaagt 120
 tggcttgaaa ggtcctatgg ctacacctat tggcaagggt catcgatctt tgaatcttac 180
 attaaggaaa gaacttgggc tctatgccaa tgtcaggcct tgcaacagcc tcccaggcta 240
 catgaccaga tacgatgatg ttaaccttgt gacaattcgt gaaaatactg aacgagaata 300
 tattggtctt gagcatcacg ttgtgacacg tggtgtagaa agtttgaaaa ttactacccg 360

ccaagcaagt ttgacagtgg cataatatgc ttttcattat gccaaaggcca atggccggg 419

<210> 581

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-A6

<400> 581

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ttcaaatgaa ccaaagccat ccttttataa tgacaactgt acagtttttg tgtcaaatat 120

tgacttgaaa gcaaatgagg atgatctcag gcgattcttc tctgatattg gtggtgccac 180

agcaataaga ttgctgaggg acagattcac caaaaaatca agggggttgg cctatgtgga 240

cttttttagac aacaagcatc ttgaggcagc tattaagaaa aacaagcaga agctgcttgg 300

aaagaaagtg agtatcgcg gatcagatcc aagcaagggt aagaagagcc gtgaagcagg 360

tcaacaatc caggataatt tacctccgag tgggtggtgat gatgcaaaag caacaggatc 420

cagtggacca gac 433

<210> 582

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-A8

<400> 582

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tgctggcgac cacggacctt agccagtaca aggaccatgg taattggatc gagattctac 120

gtgtggataa cctgttcagc accggcaagg gaaaccttga cgggcagggc ccagccgtgt 180

ggagcaagaa ctctgcacc aataagtacg actgcaagat ccttcccaac tcgctggtga 240

tggacttcgt gaacaacggg gatgtgtccg gggtcacgct gctcaactcc aagttcttcc 300

acatgaacat gtaccggtgc aaggacatgc tgatcaagga cgtgaccgtg acggcgcccc 360

gggacagccc caacacggat ggcattccaca tgggcgactc atccggga 408

<210> 583
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<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-B1

<400> 583

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gtccccctcgc cggccggcgg agctcacggc ttgccgctgc attgccatcg tgtcacttgt 120
acacaatcca ccaatctgat tggattcggg ggaatgcttg ggcaaattcg aatttgctca 180
ggcattcgtt ccgattgcgg ctagctagct gatcgcttaa tcacccgacg cgggcaaatt 240
tgcacggcga cgacgatggg catcttgtgt tgtttccagt cccacaccag cgatcacgct 300
gttgcttcgt ccccggtac ctcttcgtcc tctgccccct cgtcgtgccg aaacaacgat 360
cgccgttgct cccc 374

<210> 584
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-B10

<400> 584

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ccacgccgga caccttccca ctccgcatgg gatccaagcc tggatcatctg atactcaacc 180
gcaacgttgc cacgatgate cgatgtggag atcatagaac acggtggtga tcacttctcc 240
tttactca aggagggccc gactggaatc tggaccctcc agagcaacga cctactcaag 300
taccaccatt gcatccgctt tgcagtcaac tctggcggct accacaacgc tcgacgacgt 360
catccccgcc gatttcaagg ctggcaccac ctattggacc acac 404

<210> 585
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-B12

<400> 585

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cgacccatgg gttcgcatg gttgagacca cgcagggtgc gctggaggct gaaatgaatg 120

agatctttgt cccctacaga ggattcttca accggaatgg ggtggaagta tccgaggtag 180

tattggaaga ggcagacgtg tccaaagcca ttctaggtta catcactgca aacaagatcc 240

agagcattgc gctcggcgga gccagcagaa atgcgttcac caagaaattc aagaacgcgg 300

acgtgccgtc gaccctgatg aagtgcgctc cagactactg caacatctac gtcgtggcca 360

agggcaagtc cgtcaatgac aggtcgcga agtgcgcgct cccgccgatg cacactggcg 420

c 421

<210> 586

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-B4

<400> 586

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gcattggcat tttgcacctg aaactaagtc aattgaccgc ccctgatata tttgcttgcc 120

aaaatgtggc gacctataca caaaacactg aaaactgggt acagttctcg cattctctgt 180

tttagttgag tttgcaggta gtagagacga catgactcag tcaaccgctt gttctttgac 240

aacgacggct gctgcagcaa gtgggccatt gttagcgtca agcttcaggg agacatcctt 300

gaacatcttg cggtgaggg tgttgtaaac cgctctcgag tactgccgcg acgtgttcct 360

ccagtccatt ccagctttca tcatcagctc gaactcctcg tagct 405

<210> 587

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-B5

<400> 587

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ggggtggggg gggggggggg gggggggggg gggggggagg gggcggggg gggggggggg 120
 gtgcgcggcg ggggtggggg gggggggggg ggggcgctgg gggggggggg gggggggtgg 180
 ggggtggggg ggggggtggg gggatggggg ggggcccggg gggggggggg gggggggcgg 240
 ggtggggggg cggggggggg ggtggggggg gctggggcgg gggggggggc gggggggggg 300
 gggggggggg gggggggggg ggggggctgg ggggtggggg gggggggggg gggggggggg 360
 ggtggagggg gggggggggg gggggggggc ggtgggcggt ggtgggcgg cggggggggg 420
 gggggcgggg gggggggtgg gggggggggg gg 452

<210> 588
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-B7
 <400> 588

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 tgctgatgct ccggcgacgg cggcgggcgg ggcgtcgtcc gggccctcta gcgcacccgc 180
 gccatcgctg tctgagtcct ccggcgacac agggccgctg tcgtctgatg ggtcctccgg 240
 cgccccggcg ccatcgctgt ctgatgggtc ctccagcgcc ccggcgccat cgtccggcga 300
 cgacggatca gcttgagcgt gagcgatgac gcggagtttg ggtcatttcg tgcctactca 360
 gagacgacga tctcttcttc caattacaaa ttggccgtcc gtttactcct cacaatgtg 419

<210> 589
 <211> 307
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-B8
 <400> 589

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 aaacaataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaca aaaaaaaaaa aaaaaaacag 120
 caaaaaaagc aaagaaattc atgggggggag acagagtgag atgggtgctc agctggccag 180

gctcgcagca gccgcctgcg tcggacgggc cgcgttggtc gccttcggcg cctcgcctctg 240
 ccggcgcgcg ggccggagcg accccggggg gcaccgatgg tcccgcgggt cctgcccgcc 300
 gttccgt 307

<210> 590
 <211> 281
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-C1

<400> 590

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 gacgatgtat agtttcgtcg actgcttcat acacatatat agcagcccaa ttaatgtaac 180
 gtcacgcaaa taagcatttg cggtaatttt ttgtctcgtt gattcgatga ataaagggca 240
 tgcttgagag taaaaaaaaa aaaaaataaa aaaaataaag a 281

<210> 591
 <211> 262
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-C12

<400> 591

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 gtccaggcag cgcctcgggc gtctcccgcc cagatgcgtc tcctgcaggg ttgggggtgcg 120
 agtggcgccg caggatgatg ggtgggttcc tctccacggt cggcctgctg gccttgtggc 180
 gatgcctatc gtgcctatgc atgctacggg accgttgaac gcgaggagcg cgcagagtga 240
 gcagctcaga ttgtgggggc ag 262

<210> 592
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-C4

<400> 592

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gaagagcgac gtctacagtt tcggtgtgat ctttctggag ctactcaccg ggcggaagcc 180
agtcgaccac accatgccga aaggccagca aagccttggt acctgggcca ctccaagggt 240
gagcgaagac aaagtgaagc agtgtgtcga tccgaagctc aacagcgact accctccaaa 300
ggcggttgca aagctggcgg cggttgcagc gctgtgcgtt cagtacgagt ccgacttccg 360
gccaaacatg accatcgtgg tgaaggcgat cagcctctc ctgaacgc 408

<210> 593

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<212> DNA

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<223> Clone ID: LIB148-035-Q1-E1-C5

<400> 593

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caacgagctt ctgctccgac gacgacgacg cgccgccaca gccacatggc ggacgacgcc 120
gtcgccgcgg gagcgccgt ttgctgcgca gggccggcct cgctgtcttc tagcaggaag 180
cagcagcagc agcccagca cgccggctgc ggcagcagca gcagcgacga ccactaccag 240
cacgacgtga tcatgctgag gcgacgagg agcggggcgg cattcccgc gccgatctcc 300
gtgatcggca agggcgggcg gccgtggctc tgctgctggg cgcaccgca gggaggacgc 360
ctcgtgctgc ggcagatgcg cctgccgtcg caggagctgc tgcagcctg ca 412

<210> 594

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-C7

<400> 594

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cacggcctct cctgctatcg ctgctggctg ccgtgctagc ggtggccgcg gatgtcgcca 120

acgccggcca cgccaagccc ctgacgcctg gcggggcgct ggtacaccac aaccacggca 180
 agttcacggc cggggcgtgg aaacccgccc acgcgacctt ctacggcggg cgggacgggt 240
 ccggcaccac ggcggggcgcg tgcgggtaca aggacacgcg cgcgcagggg tatggcgtgc 300
 agacggtggc cgtgagcacg gtgctgttcg gcgacggcgc gccctgcggc gggtgctacg 360
 aggtgcgctg cgtggacagc cccagcgggt gcaagcccag cgcggcggcg ctggtggtga 420

<210> 595
 <211> 356
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-C8

<400> 595

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 acggggcggc aaacccatcc gcatgcgcaa gggccgcaca gtcacgcagt atcacgacga 180
 ctacacgctc accatccgcg acaacttcac caccttcacg ggcaaggcaa gccagcagat 240
 ccatgaccgg acggggcacgc acggcaagct gcacacttca tcacagtca gctgctactg 300
 aacctgatcc ctcaactgcc tctgagagat caagtgcgca gacaggtcca agtca 356

<210> 596
 <211> 52
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D1

<400> 596

tttacattac tacaccatat agtgagtcgt attaaactat atgagtgact gt 52

<210> 597
 <211> 247
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D2

<400> 597

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gcacatccaa ataaaagcga cagacctcag ccctcaggca agcggaccgc cgacgtacca 120
ccgcgccaag ccgagagaaa gatggagatg atcaagagga tcgctcatcg ccgcgctcct 180
cgtagtcgcc gtcgcgccca ccggagtgtt ggcttcgcac gaggccgcgg ccgccggcgc 240
cgcagcc 247

<210> 598

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D5

<400> 598

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tcctgcagga ggccgacgag aaagccagcg agatcagtgt tgccgccgag gaggagttca 180
gcatcgagaa gctgcagctg gtggagtcgg aaaaacggag ggtgcggcag gagtacgagc 240
gcaaggagaa gcaggtggac gtccgcagga agatcgagta ctcgacggag ctgaacgcgg 300
cgcgcatcaa gctgctgcgg gcgcaggacg acgtggtgac cgggatgaag gagagcgccg 360
gcgacgcgct gctccgcgtc accaaggacg ccaacgccta c 401

<210> 599

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D7

<400> 599

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tcaatcaagc ccagacatat atagaatgag aacgggcaat ggattacctg cgttgaggca 180
cccaatagta gatggaagta tagagaacga ctcggcattg ggagatttcg ctgagcactc 240
gccattcggg agcagcaatt cgctgccaga gttgggacca gatggcacac aagatctagc 300

cttctaccaa agaagcagcc ctgaacagca atggagctgg tccgggtctg ttgcaacaga 360
ggattccgat gacttcgagg ttgcaacgaa ttgctcgtca ga 402

<210> 600

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D9

<400> 600

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ggaggccgcg ctcgggcgccg gaatcgccgc cgcttcgcc gctggactcg tccgtgtcta 180
cctttccatg cgggactccg actacagctt cctcaagttg ccacgtaatc tcgaggaact 240
ccaaatcttc actggccacc ttgagaacta tactagtgc tacaccctac aggtgttggt 300
aggttattgc gctgtgtaca tcttcatgca gaccttcatg atcccaggga caatattcat 360
gtcaactgctt gctggtgctc tgtttgggca actgcggtggc cttgcgctg 409

<210> 601

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-E1

<400> 601

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cgcgctgtac gcgcagaagt ccgtcgggga cgggggcaag gagcccctgg acaagaagct 240
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caccaacatc accgcggcgc tggaggatat cccggtgagc aacaccaagc gcgtgatcct 360
ggatctcaag cccggcgctc agttccg 387

<210> 602
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-E10

 <400> 602

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 ttggtgcggc gccggccgcc gcgaacgcgc ccggcggggc gttcagcaac tgggtggcga 180
 tgaaccagca gagctacgcg ctgtacgcgc agaagtccgt cggggacggg ggcaaggagc 240
 ccctggacaa gaagctgtcg gagggcgaga agaagaaggt cacgtacgtg gtggacccca 300
 gcggcaaggg cgactacacc aacatcaccc cggcgctgga ggatatcccg gtgagcaaca 360
 ccaagcgcgt gatcctggat ttcaagcccc gggctc 396

<210> 603
 <211> 243
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-E3

 <400> 603

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 gcaaccaatt ttataggtca attctttttat ttgtataaaa aaaaaaaaaa aaaaaataaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagaaaaag ggccgacacg ctaaaggatc 240
 aag 243

<210> 604
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-E5

 <400> 604

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 tcgacaacgc gggcatgtgg agcgtccggc ccaacgtctg ggagcggtag tacctcgggg 360
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<210> 605

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-E7

<400> 605

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 ccttcctcgc cgacgagctc cactgagcga cgacgctcgg ggccggaacg ttgggatcat 360
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<210> 606

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F1

<400> 606

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 cgacggggtg accgacggga acggcacgta cagcatcgag ctcaaggaac accaacaaga 420
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<210> 607
 <211> 225
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F10

<400> 607

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 caagacaagt ttatgtgacg caatacacgc tgtcgctaag gatacaaggc ctacatcgca 180
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<210> 608
 <211> 336
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F12

<400> 608

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 cttttcacat gtttgtgatg taaatgccca tactagaatg tcaccaaagt gttgattatg 240
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<210> 609
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F3

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ggcggacagg acacgctgta cgaccacaag ggctgcact acttcaaggg ctgcctcatc 360
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<210> 610

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F4

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caaacaagat gaggttcagt ttgccggcag agcaggaaaa ctatgtgcgg cgggtggcttg 300
aggaacggac tgggctgttg ccgaagtttg acataaagtt ctatcctggg aagttttcaa 360
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<210> 611

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-G1

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ccgccgtcga caacgacctc cccgactacg tcatccaggg ccgctgttat tgcgacacct 240
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agtgaagca cttcggcacc ggcaagctcg agcgtccat cgacgggggtg accgacgggg 360
aacgcacgta cagcatcgag ctca 384

<210> 612
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-G10

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aggcgtcgtg tccggcaacc tccgcggccg tggcggcggc gagggccgat gacgccctgc 180
gccagcgcgc gcgggggctc gtgcaggtcc gggagcggga ccagggcccg ctgtcgacgg 240
ggcaccagca cctgcaccac catcaccacc agctgcggcg gtcggcgggcgt ttcccacccc 300
gccgcccggg gccggggcgc cgccctcctc agcgtgcga aagcgacctc aacatcaggg 360
agcaccgctc ctgcagcgag gtggccggcg gcac 394

<210> 613
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-G11

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aggctccgagc ggccgagcgc caggaactgc ctgcgccagc agagccacgt gtgctggagg 120
aacggcaagt tcgcgcagga catgatcctc cggctcagga acgtcgagag cggggagata 180
cagctgcagc tgcaagtgggt gaacttcctt cctggctctg ctctgtgtgc tgcaacaacc 240

aggtgacctg atgatcgatg gtagctgctg ttctgtcgc cattgcctcc tgctggcagg 300
aacaggaact ctctgaagca cggggtcagg gtagttcatg ttgcttcgat tcgatcgtag 360
gggagataat gccggatggc tttgtaaagt ttgggaggac atgcat 406

<210> 614
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-G12

<400> 614

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agtatcatgt ggtcgtagt gcacgtgcag gtgctggtgg cgggtggcatt agcatttctg 120
gtaggcgggtg cctggtgtgg tcttcccaag gttcccccg gtaagaacat cacagtcaaa 180
tatggtagtg attggctaga tgccaaggcg acatggtagt gcaagccgac aggtgctggc 240
cccgcgcaca atggtggcgg ctgcgggtac aaggacgtga ataaggcccc tttcaatagc 300
atgggcgcgt gtggcaacgt ccccatcttc aaggacggtc taggttgtgg atcctgcttc 360
gagatcaagt gtgacaagcc agcggagtgc tctggcaagc c 401

<210> 615
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H9

<400> 615

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gcaaggctac tgaaggaggc tctctgctga aactccatt caccacgata tttgagtatc 120
ttcagttact gaagatggtt gctacatcca tgagctgtgt gggctctccac gggatgttct 180
atctcgctgc agctgtgtct gacttctatg ttccatggga tagcatggca aacataaga 240
tccagtcagc ccgaaggccc actggatatg aagctcagcc aggttccaaa aatgctcccc 300
gttctgcgca accattgggc ccccttggcc ttctgcgtat ccttcaagct ggagacggat 360
ccagacattc tagttcagaa agcagagacg gctc 394

<210> 616
 <211> 279
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-A1

 <400> 616

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 cagcatgcgc ctgagcgaag cgcacgacag ggcaggtggc agcactgctg tctgtcctgt 120
 tgacggcgag gcgagctcga gcgcggagcg ggtggccact ggtataaccg acggggacct 180
 ggatgagctg aggggatcca tggatctcgg cttcaggttc gacgagcaga acggcggccca 240
 ggacctctgc gacacctctc ccgccctcga cttctattt 279

<210> 617
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-A12

 <400> 617

 gggtcgaccc acgcgtccgg cggcgctacg accactccta ttgccgctgc tggtcgccat 60
 gctagcggtg gtcgccgatg tcgccaacgc cggccacgcc aagcccctga cgctggcg 120
 gcgcgtggta cagacaacc acggcaagtt cacggccggg ccgtggaaac ctgcccacgc 180
 gaccttctac ggcggggcggg acgggtccgg caccacggcg ggcgcgtgcg ggtacaagga 240
 cacgcgcgag caggggtacg gcgtgcagac ggtggctgtg agcacggtgt tgtttggcga 300
 tggcgcggcc tcgggcgggt gctacgaggt gcggtgctg gacagcccca gcgggtgcaa 360
 gcccgacgcg gcggcgctgg tggtgacggc gaccgacctg tgccccccc 409

<210> 618
 <211> 293
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-A2

 <400> 618

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tcatatcgag tttgcaacct gtattgaaat tactacgtgg acggagagcc agcggcagca 120
gcccatgcat cggaagaggt cgccaccgcc gccgagacca cgacgacggt ggaggcgaat 180
aagaacgccg aggaggccgg gaaggagaag ctggcgacgc aacgctgatc gactgtccgt 240
gcatgcgtgc caattaatat aattggctga tgatgcctga tggtcagtgt gtg 293

<210> 619
<211> 286
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-A4

<400> 619

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aaccactgca caggatgtcg tggcagacgt acgtcgatga gcacctcatg tgcgagatcg 120
agggccacca cctgagctct gccgccatag tcggccacga cggcgccggt tggggccaga 180
gcaccgcatt cccacagttc aagccacagg agatgaccaa catcattaag gacttcgacg 240
agcctggggt tctggccccg atctgcctct tcttggccc caccaa 286

<210> 620
<211> 57
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-A6

<400> 620

ccgggtcgac ccacgcgtcc aaaaaaatc atattatgaa gcaaaaaag aaacaat 57

<210> 621
<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-A8

<400> 621

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ccgccccgcc acatgacgga gtcagagggc gagacggagg ctgcgcgcgc ggccgtgctg 120
acgccgccgc tgctgctggg gggcgggcggg ctgcggggg agctccgccc ggccaacctc 180
ggccaacggg tgctcagcct ctcccgcaac gtccgcccgg gctccgacct ctcccacttc 240
cagctgccgg cgacgttcaa cctgcccaag tcgcagctgc agctgtacgg cg 292

<210> 622
<211> 356
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-B10

<400> 622

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ctcgggctga gcggcgggcg cggtatcagc gccggggacg cgctgcggcg gacgcgtgcg 120
gagcgcaggc cgacgaaccg gtacatcagc tacgcagcgc tcgcgcgcga ccagggtgccg 180
tgcaacaaac gcggacggtc ctactacacc aactgcgcgg cgcaaacggc cgccaacccc 240
taccgccgcc gctgctccgc catcacacgc tcgccccgca ggatgaactg agcgccatgg 300
cggccgcctg cggtctgata tgcttctggt ctggatgggc atggggcacg cagctg 356

<210> 623
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-B11

<400> 623

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ttcaacgggt acatggagct catggaaatg gccagaaaaa ccggggtcaa ggtccaggcc 120
gtcatgtcct tcaaccagtg cggcggaac gtcggcgatt cagtcaccat accacttccg 180
ggatgggtct tggaggagat ggacaaggac caggacctgg cctacaccga ccggagtggc 240
cgccggaact acgagtacgt ctccctgggc tcgcagcga tgcccgtgct caagggccgc 300
acccccatcc agtgctacgc cgacttcatg cgcgcccttc gcgaccactt cgccaccttc 360
atgggcaaca ccatcgtgga ga 382

<210> 624
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-029-Q1-E1-B12

 <400> 624

cgttgcaaca ctctatagtg agtcgtacta angccgacgg gcccgggcag tacaacttca 60
 acgggtacat ggagctcatg gagatggcca ggaagaccgg gctcaaggctc caggccgtca 120
 tgtccttcca ccagtgcggc ggcaacgtcg gcgattcagt caccatacca cttccgggat 180
 gggctcttga ggagatggac aaggaccagg acctggccta caccgaccgg agtggccgcc 240
 ggaactacga gtacgtctcc ctgggctgcg acgcgatgcc cgtgctcaag ggccgcaccc 300
 ccattccagt ctacgccgac ttcattgcgc cttccgcga ccatttcgcc accttcattg 360
 gcaacaccat cgtggagatc caggtcggca tgggccctgc cggcgagctg c 411

<210> 625
 <211> 278
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-B2

 <400> 625

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 gacgtcattg acatcgcaca tgccgcgatc tccattgtgg agagcagtgg cggcggcggc 120
 gacggcagcg cggggagcga cgaggcggca tcgtccatgt tccagagggt ctgggactcc 180
 gccatggcct tgggccccct ggacgacgag acggacaccc agtcccagat gagcgaggcg 240
 tcgaggtcgc agatgatgat gtccgatgtc caccacca 278

<210> 626
 <211> 282
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-B3

<400> 626

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cggtggtcgt cggcgttgtc gccaccgtca cccactccgg caagaaggcc ggcgacgact 120
tcaccgtccc gggggaagcc tccattgcc a gtcgcggcaa gtcggtcgag tccctgtgcg 180
cgcccacgtt gtacaaggag tcgtgtgaga agacgctctc ccaggccacc aatggcaccg 240
agaaccccaa ggaggtgttc cacagcgttg ccaacgtggc gc 282

<210> 627

<211> 276

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-B4

<400> 627

ccacgcgtcc ggctaacttg taatctgcag gatctaagca aagacttgat ttagttatgg 60
acggattggt acgcctcttg aaagtccgcg tggtcgggg tatcaacctt gcctaccgcg 120
acgcaagagg cagcgatccg tatgtcgtcc tacggcttgg caagaagaaa ctgaatacaa 180
gcgtaagaa gagatccgtg aaccccatat ggcaagagga gctaactctg accgtcacag 240
atcccatcca accactgaat ctggaggtgt tcgaca 276

<210> 628

<211> 290

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-B5

<400> 628

cccgggccga cccacgcgtc cgcccacgcg tccggcagcg gtggccgtct ccacctctgt 60
gtgcacgtcc tcaaggcgta gcacgggctg tccgaacgtg aggccccagg cccgtccgct 120
cctaggcagg ccgtcgccgc gccggaggct gcagacggcc ttggccgcga cgggcaagac 180
gccgggagag gcggaggagc aggtccccgc gtgggccaag cccggcgcg acgagccgcc 240
accctgggag cgcgagggcg gggccgcgcg tggacaggag gcccggcagg 290

<210> 629

<211> 291
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-B6

 <400> 629

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 cggtgaccaa gagtcgcgct acatcaacac agccgatgcc cacgtcaaaa accggtcgct 120
 acctctctcg acattgatcg agatgctgaa ggataagact gggaaggact acattgatgt 180
 agggtaaatc cggctaacgc tttttaacct cttcaaagac gatgccagcc cgaagataaa 240
 gaagttcatg aagggtcatgc tgaacaagtt acagcatggg cagcacggag g 291

<210> 630
 <211> 307
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-B7

 <400> 630

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 ataaggaagg catatgcaaa agcagccatg gcgaactcgt cgtccggcct tgcagtgaac 120
 gatcagtgca aggtgaactt cccgggagctg acgtcgcggc ggagcttctg gttcatcatg 180
 tgcaggatcg actacacaga catggagatc aagggtggacc tcctcggcgg accgaaccag 240
 tgctacggcc acttcaccga cagcctcccg gccaaagaat gccgctacac gatctacgac 300
 ctcgact 307

<210> 631
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-029-Q1-E1-B9

 <400> 631

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 ggaggaggag ctcgggctga gcggcgggcg cggcatcggc gccggcgacg cgctgcggcg 120

gacgcttgcg cagcgcaagc cgaccaaccg gtacatcagc tacgcggcgc tgcgcgcgga 180
ccaggtgccg tgcaacaagc gcggccggtc ctactacacc aactgcgcgg cgcagacggc 240
cgccaacccc taccgccgcg gctgtctcgc catcacgcgc tgcgcccgca gcatgaactg 300
agcgccaagg cggcgggccgg cggctctgatc tgcttgctgg ctggctgggc anggggcacg 360
cagctggcct ggctcgatcg cacaccatgc attgacgtcg tcgccggggg gg 412

<210> 632
<211> 278
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-C1

<400> 632

ccacgcgtcc gcgacaagat ggcgtgcaca aacaatgcga tgagagcctt gttcctcctg 60
gtcctcttct gcatcgtgca tgggtgagaag gaagagtcaa agggcatcga tgcgaaagcg 120
tccgggcctg gtgggtcctt cgacatcacc aagttgggcg cctccggcaa tggcaagaca 180
gacagcacga aggctgtgca ggaggcatgg gcatcggcgt gcggcggcac tgggaagcag 240
acaatcctca tacccaaggg tgacttcctt gtcggaca 278

<210> 633
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-C10

<400> 633

cgggtcgacc cacgcgtcca aaaaaactca gataacaaac aaaagttaca actctggtac 60
aacatggctg cgtgataaca tgcattgtatc tgaccaaaac aaggtgacgg cggcaagcaa 120
gcacacgcag ataaaaaaat ggggcgcccc ccctaaaggt tcaaagctaa ggtacccttc 180
aatgcaactt caaaccctt caacagggtc cccaaattcc aattcaaggg ccttcgtata 240
aaacattctc aaagggaataa cccttggtt taccaaacta aagccccttg aaaaaaacc 300
cccttcccca aacgggataa aaaccaaaga ggcccgaacc tttggccatt ccaaaaattt 360
gccacccaa aaaggaaaat ggaaccccc c 391

<210> 634
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-C12

 <400> 634

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 ctcaacggcg tccccgccgg cgggcctcgg ccaaccccg gctgcctgca agggcttctg 120
 atggccctcg acgccgtcct ttcttccaat tgcccagctt tattgcagat ccagccctct 180
 gatcctcgtc ttctttcacc tctccaacat gaaggtcaac accaagatca agctggagcc 240
 ggtcatggcg ccgtcgtcgt ccctgccgcg gagcgccagc gagctaccg acccgccgtc 300
 accgttcagc tccaacacgg cgcaccaccc cgtctccgtg cccaccacac ctaggttgtc 360
 cttatcgtgc tcgtcgttcg gccacatggt gacccgccc accg 404

<210> 635
 <211> 278
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-C2

 <400> 635

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 ggggagggct cagaaacctt tcatccaata catacatcta tctgagccct ttcccgcggt 120
 gagggccgac cggagtcacac acacacacgg tgtctatggc ggccgtaata aggagccgcc 180
 gccgcgtgtc cgttttcttc tacgtcgtcc tcgccgcagc tgcagctgca gccgcggcgc 240
 aggcatccaa taacgtcacc tccgacgagg agtactgg 278

<210> 636
 <211> 125
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-C3

 <400> 636

ctcccgggtc gacacacgcg tccaggtgaa ctcgcaacac cagtgttctg caatattaag 60
cagaagctat tgtattgttt gggtcgtttg tcagctaatt gaaatgcgat ggacatttac 120
tagta 125

<210> 637
<211> 266
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-C4

<400> 637

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agagcatcct ctatgtctgt gcaggaagag caaagttcct caaacacgtc atatgaggaa 120
acggaatctg tgttggtgaa gctgatcgca cgtcagatca cacttttgct gtcattccatt 180
tgggctcaat caacatcccc tgaaaatact cctgtgaact atgaagccat tgctcatact 240
tacagtttgc atctgttggt ctctgg 266

<210> 638
<211> 289
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-029-Q1-E1-C5

<400> 638

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ggggaaggac gagaggttcc cgggtgtgga ggccgcgctc ggcgccgga tgcgccgcgc 120
cttcgccgct ggactcgtcg gtgtctacct ttccatgccg gactccgact acagcttcct 180
caagttgcca cgtaatctcg aggaactcca aatcctcact ggccaccttg agaactatac 240
tagtgactac accctacagg tggttgtagg ttattgcgct gtgtacatc 289

<210> 639
<211> 290
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-029-Q1-E1-C7

<400> 639

gggtcgaccc acgcctctac agtcatctac gatagctagc cagctagtaa caagaacana 60
aaacacaatc atctcatccg cccgtctcaa cgccacccta gccctgtgat atacaatggc 120
ggcccagagc acgaggatgg tggcgctggc cctgggtggc ctcttggtgg tggcgacggc 180
gttggtgccc acggccaccg cgtacggctg ctacgacgac tgctacgagc ggtgcgccaa 240
cggcaagaag gacgaccccg cctgcaccaa gatgtgcaac caggcgtgcg 290

<210> 640

<211> 269

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-C8

<400> 640

ccacgcgtcc ggcatagagc tccaccaccg ccaccgccac cgcggatgcg tacgcgtctc 60
caaagcagaa ggtcgtcagc agccagccca tggccagcgc cgctcctgac gagcttccgc 120
tggcggccaa gagttccacc acctccgacg cgtacgcatt tccaaggcag cagcaggtcg 180
ccagcagcca gcccatgtct ggtggcgctc ccgacgagct tccaccggtg gccaaagacct 240
ctgccacgcc cgaaccgtac gcattctctg 269

<210> 641

<211> 279

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-D1

<400> 641

ccacgcgtcc gcccacacgt ccgccacgc gtccgatcgc ggcgtaccac ttcgatttag 60
caggcacggc gttcggcgcc atggccaaga acggcgagga ggagaagctg cgcaaggcgg 120
gcatcatcga catgcagttc cgaagggtta agtgcaagta cgactccaag gtcaccttcc 180
accttgaaaa ggggtgcggc cccaactacc tggcactgtt ggtcaagtac gtcgacggcg 240
acggtgacat tgtggcagtg gacgtcaagg agaagggct 279

<210> 642
 <211> 379
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-D11

<400> 642

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gacaggaacg ggttccatgg caaccgcgag ttctctgtgg aggtgctgat gctcagcctc  120
ctgcaccacg cgaacctcgt caagctgctg ggctacagca ccgactccaa ccagcggatc  180
ctgggtgtacg agtacatgcc caggggctcg ctggaggacc acctcctgga cctgcccccg  240
agctggaagc ccctgccgtg gcacacgcgg atgcgggtcg cgggtgggcgc ggcgaatggc  300
atcgagtacc tgcacgaggt ggccaacccg ccggtgatct accgcgacct caatgcgttc  360
aacatcctcc ttgacaagg                                     379
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<210> 643
 <211> 269
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-D12

<400> 643

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gcggcgagct tgtaaacgac cggcttgccg ccgatggctg gatgcttcgc gttcgcgtcg  120
tcgatcgca gttgcgcgcc gttctgcagg tccttgccga tccgcgcgga cgggccggtg  180
agcggcgcg cagacccgat caggatcgtc tgcggcgcg attgcgcgaa cgcgggaacg  240
gatgcggcca gggcggccgc tctagagga                                     269
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<210> 644
 <211> 279
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-D3

<400> 644

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 cctacttcca cgccttcggc aaccccgacc tcgcggcggt ggtctccggc gacggcgga 180
 gcgcgcaggc ccaccggcgc cgccgctcca ccgacggcgc gaaggcggag gacggcagga 240
 gccccaccac cacaacggcg aggcgcgcgc cgtccatgt 279

<210> 645
 <211> 254
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-D4

<400> 645

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 ggaagctgcc ggccttcctc caaagtgaca agaacgtcac cgtcatggac atcaacatgg 120
 aaggtcgcca agggttcagt tcgtggtacc aacaggcgat aaactaaagc gataagggcg 180
 tagagatccc atacgacata ttcgtcaccg tctccgttgc tctgcagctc ggatcagtca 240
 acctcagcca tatt 254

<210> 646
 <211> 291
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-029-Q1-E1-D5

<400> 646

ccacgcgtcc gccacgcgt ccgcggaacg cgtgggctga taattgcagg ttccaattcc 60
 aaccgggaat ttttaagaag caataaatta aaaggctttt canaatggag gatgtgagca 120
 tgggcatgtg ggtagagcgg ttcaacaaca ccagacttgt taaatatgtc cacagcatca 180
 aattttgtca atttggatgc atagatgatt attacactgc aactaccaa tcaccaatgc 240
 agatgttgtg tttgtgggac aaactgcagg ctggaaaagc ccaatgctgc a 291

<210> 647

<211> 262
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-029-Q1-E1-D6

<400> 647
 gggtcgacnc acgcgtccag cgtccccgaa ccaagaacat gaccataacc ggcgtgctcc 60
 ggccgctcct cctccctggg cctcccccg ccgcggataa aaatttccgc cgaaggcgaa 120
 ggccaaggca acggcggttt gaaggccgtt gccgatgccg gcgccggcgg caatccaacc 180
 ccaaccaagg aacgccaacc aaacctggcc gctgggaaaa caacaacccc tcctcaaggc 240
 ggcggttact caacccaac ca 262

<210> 648
 <211> 289
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-029-Q1-E1-D7

<400> 648
 gggtcgaccc acgcgtccgc ccacgcgtcc gcggacgcgt gggccgccgt cctaccttca 60
 tatacctagc agtgtctctg catagaaaga taaaagggtan gaggaggcgc agtgcgtggt 120
 gggattatatt gtgaggagat attggagtta ttatatatat atatatatag gtagacgata 180
 gatagacagc tagatctata taacatggt ggatgggttc cgatggatca gaccgggctc 240
 ttctgtctctg tacttgggtct tcttcttctt gtccgcagcc ctgtcggag 289

<210> 649
 <211> 306
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-029-Q1-E1-D8

<400> 649
 ggtctagaac taccggggtc gaccacgcg tccgccacg cgtccgccca cgcgtccggt 60
 tcagggcacg cctcaagaac ggcacacctg atctgggggt aacgatccag gccagaagc 120

agtcggagct ccctgagcag gtcctctgct gcgtcagggt gaacaagatc gatttcactg 180
 accaagaagt tccaacaata gtcaccgttg atgacacctg acgcatttga tcaaaatggt 240
 catcagacgt gcgagctatt attaactgct gcaaggctag atccatggga ttcagaggcg 300
 acacag 306

<210> 650
 <211> 279
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-E1

<400> 650

ccacgcgtcc gcgacaagat ggcgtgcaca aacaatgcga tgagagcctt gttcctcctg 60
 gtcctcttct gcacgtgca tgggtgagaag gaagagtcaa agggcatcga tgcgaaagcg 120
 tccgggcctg gtgggtcctt cgacatcacc aagttgggcg cctccggcaa tggcaagaca 180
 gacagcacga aggctgtgca ggaggcatgg gcacggcggt gcggcggcac tgggaagcag 240
 acaatcctca taccgaaggg tgacttcctt gtcggacaa 279

<210> 651
 <211> 417
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-029-Q1-E1-E10

<400> 651

ccacgcgtcc gcgtggncctt gctgagcgtg gccctagtgg gcctgctcct ctgaccagct 60
 cgcaattacc gcacccgccc agcagaacag acttcacgt cctcggtagc gtcgacggct 120
 ctagtgactg cagcaggtgc gtgtcagaat gtcgcgtcct ctaatcagat atgaatctgg 180
 ctgagacaga ctccgagtcg ccggcacatg cgccggcgcc agggccgctg tccggttgaa 240
 ctgagaatcg tgcgtccagc catgcaagggt ggtcagaatg tacaactaat tagtggctca 300
 atcatgtgtc aggctaatag tgctcttgcc ataattatat agatatacgc acagtgtgtg 360
 ctaagctacc cacatgcatt ctattgcagg gcgccgcaga tatattaaac aactgtg 417

<210> 652
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-E11

<400> 652

ccacgcgtcc ggcccctgca cggcgaccaa ccccatcgac cagtgtctggc ggtgccgccc 60
 cgactggggc cgcgaccgca agcgccctggc caggtgccc atgggcttcg gccacaggac 120
 caccggcggg ctggccggca agttctacgt ggtgattgac ccagcgacg acgccgccga 180
 cctcgtcacc ccaggaagg gcacgtccg gcacgccgtg acccgggccc gggcgctgtg 240
 gatcaccttc gcgcgcgaca tggatgatcga gctctgccag gagctcatcg tgagcagcga 300
 caagaccatc gacggggcgc gagcgcaggt gcacatcgtg ggcgcgaga tcacgtgca 360
 gaacgtgcgc aacgtgatcc tccacaacct gcacg 395

<210> 653
 <211> 297
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-E3

<400> 653

tctaggactc gcgggtcgac ccacgcgtct aaacagactt gcagtcatt cctccaccac 60
 caccaccaag ctcaacaaca gccagctcgc gaaaataatg aagagccgca gcatggcatc 120
 atcgccgcgc ctcttggtgc tagccctcgc gctagtggcg gccaccgccc cacaggtagc 180
 ggaggcaaag aagaagagag cggcggagag cggcgaggcg gcggaggcga agaagatcca 240
 ggacgacttc tgctcgacgc tgtgcgaggg caagaagggg acggacctgg tcgtgtg 297

<210> 654
 <211> 279
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-E4

<400> 654

ccacgcgtcc gctctctcct cggtttcttc tcccaccacc aacccccaga tcgcagcgat 60

ctccgccgcc gccctctctg ggattccgcg cgacaaagtc aggcgtagag gctccaggag 120
gaggagggag ggcgagcagg gcgggtgggg gagatgttcc tctgggactg gttctacggg 180
gtgctggcct ccctcggcct gtggcagaag gaggccaaga tcctcttctt tggcctcgac 240
aacgccggca agaccacgct gctccacatg ctcaaggac 279

<210> 655
<211> 304
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-029-Q1-E1-E5

<400> 655

ggtccagaat acncgggtcg acccacgcgt ccgctagcag caaagcaaag aggatcggat 60
cagaagaaaa gaatagttag gtcccgggtg tcgatcgaac gaagctgctg ctgctaccgg 120
ccggccggggc atgacgatga cacggacgat gtgcctaggc ctgctgcttc tactactggc 180
ggcggcgctcg acagcgacgg cgcatttcac ggtcggcgat gtggatgagt acgtgtccaa 240
gcgcacgcag gaggccccgc acaggaacaa cgggtggcgcg ggcacgatg acctcatctc 300
cagt 304

<210> 656
<211> 278
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-E7

<400> 656

aactctctat actgagtcgt attagagccc cggccccggc ggcttggggc cgcggcgccc 60
cggctggggg gcgggctgca caggtgagcg gcctccagcc cctcggcggc tcggcacaga 120
ccggcagccc gtcgcacgag ggcgggcgta ggccctcggc acgagcgcgg ctgcacgagc 180
atggccggcg cgggggcacg gccggcgcgg ctccccggcg tccaagcggc cctcggcgcg 240
tgcgggcagc accggcgtgc ggccctcgga ccctttgg 278

<210> 657

<211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-E9

 <400> 657

 ggtccagaat taacgggtcg acccacgcgt ccgggccatc gagatcttgg aatatgttgt 60
 tggaatgcgc gaggagaagc taggtacggc aaaccagat gtcgacgacg agaagcggag 120
 gcttggggag ctattgaagg aggctggccg ggtgcgaagc agaaaggcaa agtccctgga 180
 gaatctgctc gagaccaacc catatatcgc caccaagaga aatgcagttg ctgcatgaat 240
 cactgttctg aagatgaaag gcgaggattg ttactaaggt attcaattgg ttcgttcaga 300
 tgggggtaac gggaatattg gtgcttacct attaagaaaa tatgaaatga tcaaatact 360
 gatctcaaat tctttgctgt aaagttttca aatactatta ccgttacatg t 411

<210> 658
 <211> 279
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-F1

 <400> 658

 ccacgcgtcc ggccaggacc aggacgacga tggcccggcc gcgcctcctc ctcaccttcc 60
 tgctcgccgc ggcgcccggtg ctgaccacgg tgcccggcgt cgcgctcgcc aagtcgaagc 120
 tcgccaagaa gagcgacgac gtcgtgaacg ggcccctcct gaccgagaag atccaggcga 180
 agaagacgct gatcgtgggg ccggacgagg agttcaagac cgtgcagtcc gccatcgacg 240
 cggtgcccgc cggcaacgcc gagtgggtca tcgtccacc 279

<210> 659
 <211> 401
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-F10

 <400> 659

 gggtcgaccc acgcgtccgg agaatatcaa gatggaggac tcagccaacc ccatttcat 60

cgacatgaag tactgcccc acaagttgtg tactgccaac ggcgcctcca aggtcaccgt 120
 caaggatgtc accttcaaga acatcaccgg cacctcctcc accccggagg cgttagcct 180
 gctctgact gccaaggtcc catgcaccgg cgtcaccatg gatgacgtca acgtcgagta 240
 tagcggcacc aacaacaaga ccatggctat atgcacgaac gccaagggca gcaccaaggg 300
 ttgcctcaag gagcttgcac gcttctagac cctccatcga ctgacccatc tctctagtta 360
 taatttttct ctcgtccttg cattgcccac tagatgctat c 401

<210> 660

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-F11

<400> 660

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 accaccacct ccagtgaagt ctctccgcc accagcacca gttagctccc caccaccccc 120
 aataaaatct ctctctccac cggcaccagt tagctctctt ccaccagcac cagtgaagcc 180
 accatcacta ccaccaccgg cccagtaag ctacctctt ccagttgtca cccctgcccc 240
 gccgaagaaa gaagagcagt cattaccacc accagcagaa tcccaacccc caccatcatt 300
 caatgacatc atccttccac ctatcatggc caacaagtac gcatctccgc ctccccctca 360
 gttccaaggg tattaagcgc cacagagaca tggttgatga agcatgaatg gg 412

<210> 661

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-F12

<400> 661

gggtcgaccc acgcgtccac acacacgtcc gctgcgcggc gccaatccgc tcggctaact 60
 caacgacgtg ccgctggcca tctgcgcctc actgctcaa cacttggact ctgacaacga 120
 ccacgatcag taataccaca tcggcgatca cgatcgatat gtaagagcac gtcgtcaacg 180
 acggagcgca gtcgtcgag actggctggc actaaaccag atctcctctt cacgtgaatg 240

acacatctgt aactgagata ggaaaggaca acagcaatgt aactgcgtgg ctgtatcaaa 300
 ttctgagtgc tggaatcatg ctattgtcac ccagtgttcg tttatcata caagttgcag 360
 cgcagctcaa gacggctaag gacctgttcg tttgtgt 397

<210> 662
 <211> 277
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-029-Q1-E1-F2
 <400> 662

ccacgcgtcc ggaagattcc actaataggt atgcaacttt ttacatcgtt tcatatctaa 60
 taatccaaat ttcagtagtt atatatagtt atttactgca agaagttaat ttttagtttc 120
 agttactgga acttggaaga actaaaactt tttacacatg tatattattc ctgcgcagtg 180
 agactaaaat gaaaaaaga acaatcggcc cataatttat agctttcaat atagaactac 240
 atgatttggt gcaaaatatg tgattataat ttttgtt 277

<210> 663
 <211> 278
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-029-Q1-E1-F4
 <400> 663

ccacgcgtcc ggcggccgtg gccgcgctgc tgctggctgc agcgggtgtcg cctgccgcgc 60
 gcgcggcggc ggtggcggtg gcgggagggg cgccgtcggt gccggcgggt ccgctggaca 120
 tcgcgcagct gggcgccaag ggcgacggca agtcggacag caccgccatg atcctcaagg 180
 cgtggaagaa cgcgtgag ggcgacgggg tacagaagat cgtcatcccg ccgggcaact 240
 acctgacggg cgggctggag ctgaagggcc cctgcaag 278

<210> 664
 <211> 290
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-029-Q1-E1-F6

<400> 664

gggtcgaccc acgcgtccgc cacgcgtccg cgcagccggt gacaaccgaa cgcgagctac 60
ccttcggcca cgacgccgtc acgttttctt tcttggtggc gtgcgtggcc gccaccgtcg 120
cgctcgcgtc gtccatgtgc tcggcgtgcg accgcaagcc aaaggcggcc accaacgcgg 180
acccggtggt gacggcctcc tccatctccg gtggtagcgg cagccaggag gctggcgcg 240
aggaggcagc ggttagaggag gaggtggtga ggctgtcgcc ggagctggcg 290

<210> 665

<211> 290

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-029-Q1-E1-F8

<400> 665

gggtcgaccc acgcgtctac gatacctggc tcaanggcgt catgacgttc atggacacct 60
gcgtcgacgg cttcgtcgac gagaagctca aggccgacat gcactccgtg ctgcgcaacg 120
ccaccgagct cagcagcaac gcgctggcca tcaccaacag cctcggcggg atcctgaaga 180
agatggacct cggcatgttc agcaaggact cgcgccgccg actgctgtcg tcggagcagg 240
atgagaaggg ctggcccgtg tggatgcggt cgccggagag gaagctgctg 290

<210> 666

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-F9

<400> 666

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ctggcaccga tcagctcacc gccatcagag cccaagtcac cgtcgtcacc tccaatggta 120
gagaaaactt ctccaccacc ggcaacgggt agtcaccac cacctacgcc taagtcgtca 180
cctccacctg ctctgtgag ctccaccact ccagtgggtga agtcttctcc accaccggca 240
ccagtcagct caccaccacc gacacctaag ccattacctc cacctgctcc tgtgagctca 300
ccacctccgg tgggtgaagtc ttctccaccg ccgacaccag tcagctcacc accaccgaca 360

cctaagccat tgctccacc tgctcctgtg agctcaccac ct

402

<210> 667
<211> 280
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G1

<400> 667

ccacgcgtcc ggcgcgggcga cgaccgcggg cggcgcggcg ggcgactacg cgcgggcacga 60
gatggacgtg gtgaaggaca acgacatgtg gcagtgcctg aacgagtgcg ccggggagat 120
cgaggaggcg ctggaccacc tggacgacac cgagggcggc ctcgacgacg gcaagctcca 180
cgacgtgaag ctgttcctgg acacggcgga ggaggacacg tggtcctgcg acgtctgctg 240
caagcacgcc ccatccacgc ccgtcaaaac cagctgctc 280

<210> 668
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G10

<400> 668

gggtcgaccc acgcgtccgc acgaggcacg accacgttat gctgttcggg gccagcgacg 60
ccgcgtccaa ggacagggag atgcaggtca ccgtcgcctt caaccacttc ggcaaggggc 120
tggtgcagcg gatgccgcgc tgccgtcacg gcttcttcca cgtggtgaac aacgactaca 180
cgcactggct catgtacgcc atcggcgga gccggaaccc caccatcatc agccagggca 240
accgcttccg cgccgtcgac gacagcaggt tcaaggaggt gaccaagcgg gagtacacgc 300
agtacagcga gtacaagaac tgggtgtgga agtcgcagga cgacctgttc ctcaacggcg 360
ccttcttcaa ccagtccggc ggccagaacg agcgcaag 398

<210> 669
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G11

<400> 669

acaagtctct acagtgagtc gtattagtgt ctgctgttcg gggacatcga cgtaacgtct 60
aatgacaggg acatgcatgt cagtctcgca ttcagcgact ttgagacggg gctggtgcag 120
cgggcgctgc gcagccgtga gcgcttcacg gacgtggtga acagcgacta cagcactgg 180
ctcaggtacg caataggagg taaacggcat cctaccatca tcagcgacgg caaccgcgtc 240
cgcgctcgta tcgacaatac gtgtaatgac gtgaggaagc tggagtacac gcagtatagc 300
gagtatccga gctgggtgtg gaagtctcag gacgacctgt tcctcaacgg cgcc 354

<210> 670

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G12

<400> 670

gggtcgagcc acgcgtccac ggacacgtgg gtcaagatcg agaacgtcga gaacctgtcc 60
atcaacggcc acggcaccat cgacgggcag ggagccctgg tgtggagcaa gaaccagtgc 120
cagcattctt acaattgcaa gatcctcccg aatagcttgg tgctggattt tgtgacgaac 180
gtccagatcc gcggcatcac gctgctcaac agcaagttct tccacctcaa catcttcgag 240
tgcaagaacg tgctgatcga caaagtgacg gtcaaggccc ccggcgacag cccaacacg 300
gacggcatcc acatcggcga ctccagcaac gtgaccatca gcagcaccac catcggcgctc 360
ggcgacgact gcattctccat cgccccggg agc 393

<210> 671

<211> 279

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G3

<400> 671

ccacgcgtcc gctcgcttgt cctcatggcc ttgatgatca catggcacta cgtccacgtg 60
atgaagtact ggtacgagct ggaccacgtc gtgccagcca acgaagtgac aacgctgctt 120
gagaagcatg aggtgcggcg gatccccggg gtgggcctcc ttactcgga cctgggtccaa 180

ggcatcaccc ccggtgtttcc acgtctggtg cagaggatac cctccgtgca cgcggtcttc 240
ctgttcatgt ccatcaagca cctgccgatc ccacacgtg 279

<210> 672
<211> 278
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G4

<400> 672

ccacgcgtcc gaccaccttt accaccgaag agagaaacgc gagcaaccag cgatcgcccc 60
atggccgcca tggctcgttc cgtctccctc gtcgtggcgc ccttgcctct cctctccctc 120
ctcgtctccg ccgcggccag cgcgcggacc gtgggcgaca ccgtgcagga cgcgtgcagc 180
aagaccaggt tccccaaagt ctgctgtggac agcctcgccg ccaagccgga gagccagaag 240
gcgacgccgc gcaagctggc ggagctgttc gtgaacat 278

<210> 673
<211> 271
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G5

<400> 673

atagtgagtc gtataaggcg tcatgacgtt catggacacc tgcgtcgacg gcttcgtcga 60
cgagaagctc aaggccgaca tgcaactcgt gctgcgcaac gccaccgggc tcagcagcaa 120
cgcgctgggc atcagcaaca gcctcggcgg gatcctgaag aagatggacc tcggcatgtt 180
cagcaaggac tcgcgccgcc gactgctgtc gtcggagcag gatgagaatg gctggcccgt 240
gtggattcag tcgccggaga tgaagctgct g 271

<210> 674
<211> 291
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G7

<400> 674

gggtcgaccc acgcctctac acagcaccat gttcatccac atgaacatgt acaagtgcaa 60
gaacatgctg atcaaggacg tgaccgtgac ggcgcccggg gacagcccca acacggatgg 120
catccacatg ggcgactcat cccggatcac catcaccaac accgtcattg gcgtcggcga 180
cgactgcac tccatcgccc ctgggacctc caacgtgaac atcactggcg tgacctgcgg 240
ccccggccac ggcacagca tcggcagcct aaggcggtac aaggacgaga a 291

<210> 675
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G9

<400> 675

ccacgcgtcc gctcgaccac ctcaacgagc ttctgctccg acgacgacga cgtgccgcca 60
catccacatg gcggacgacg ccgtcgccgg cggagcggcc gttcgctgcg cagggccggc 120
gccggcctcg ctgtcttcta gcaggaagca gcagcagcag cccgacgacg ccggctgcgg 180
cagcagcgac gaccactacc agcagcagct gatcatgctg aggcggacga ggagcgggcg 240
ggcgttcccg ccgccgatct ccgtgatcgg caagggcggg cggccgtggc tctgcctgcg 300
ggcgaccgc gaggggtggac gcctcgtgct gcggcagatg cgctgccgt cgcaggagct 360
gctgcagccc tg 372

<210> 676
<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-H1

<400> 676

ctcccgggtc gaccacgcg tccaggatgc atcgcatag gcgtgcggcg gactgggaa 60
gcagacaatc ctcatacca agggtgactt ccttgtcgga caactcaact tcacaggccc 120
ttgcaagggc gacgtgacca tccagggtga tggcaatctg ctggcgacca cggacctaag 180
ccagtacaag gaccatggta attggatcga gattctacgt gtggataacc tggatcac 240
cggcaagggg aaccttgacg ggcagggccc agccgtgtgg agcaagaact cc 292

<210> 677
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-C6

 <400> 677

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 cgacatccac agggggggagg ggaaaacacg tgcattcacc cggcggcaat aatggcctcg 120
 gttccggctc cggcgacgac gaccgccgcc gtaatcctat gcctatgcgt cgtcctctcc 180
 tgtgccgcgg ctgacgaccc caacctcccc gactacgtca tccagggccg cgtgtactgc 240
 gacacctgcc gcgccggggt cgtgaccaac gtcaccgagt acatcgcggg cgccaagggtg 300
 aggctggagt gcaggcactt cggcaccggc aagctcgagc gcgccatcga cggggtcacc 360
 gacgcgaccg gcacctacac gatcgagctc aaggacagcc acgaggagga catctg 416

<210> 678
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-C7

 <400> 678

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 acggacgagg cggagctgca ggccgccgtg gagcgcgcgg cgcgcctgct ggcgccctac 120
 gacgcggcca tcgccgagta cagagccag gcggacgcca ccaccatccc gggccactac 180
 gtcgtgtact gggagctcat ggtgaggag ggcggggcgt cgcgccgacgc cgcctctctc 240
 gagcgtgct gcctggagat ggaggaggcc ctgaacgcgg tgtacaggca gggccgcaac 300
 ggggacgcca tcaggccgct ggagatccgg gtggtgcgcg gcggcacgtt cgaggaggtg 360
 atggactacg ccatctcgcg cggcgctct atcaaccag 399

<210> 679
 <211> 410
 <212> DNA
 <213> Zea mays

cgtaccggtc tagaattccc gggccgaccc acgcgccag gagaaccagc agcctccaat 60
 aagagccagc cagagaaact aataaaactc tcaccgccgc catccgagag aacaagccaa 120
 ccgaccccggt cccaaggca atccgctcgcc gacgtaccac cgccaccgca ggagcgagat 180
 ggagatgaag aggatcctct tcgccgtcct cgctcgatc gccgcctcgg ccaccgcagt 240
 gctggcctcc accgaggccg ccgcccgggg cgccccaact gcctccgagt cgtccgcca 300
 ggctcccgtt ggcgctggcg ctggcgctgc cgctggcgcc gccgcgcgg ggccctccgc 360
 cagcagcggc gcgcccggcc tcgcccggcg gccgcgcgg ctctcttctt cctcctcgc 420
 ctactacctc cactaagcgt gtgc 444

<210> 682

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-D11

<400> 682

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 gctggacgcy gacggcgggt gcgcccaggg gctcaacaag ctggctgaag ccttcgacgt 180
 cgcgctgggg ccgctcctcg ccggcctcgc cgacaagctg ccggggctga cctactcgct 240
 ggccaactcc ttccgcctga cgcaggacgc cttcgcgac ccgaaggcgt cagggtacag 300
 cgacgtggcc agcgctgct gcgggagcgg gcggctgctg gcggaggcgg actgcctgcc 360
 caactccacc gtgtgcagcg accacgacag ccacgtgttc tgggaacgct a 411

<210> 683

<211> 285

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-D12

<400> 683

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 caccacggct gggcagggca gctgctccac gtcacccgtg aggttcacag tgtggctcct 120

ctggtgactc gcggcttgct gggggtcgga gccatcatcg acgctgaccg cagatgccaa 180
atcttgtgct aacaccatga acgtgacaac gtgggcgctc cactcggatc atcacctctc 240
ggctgcggtg gcacacctac gctctggcga ttgagggtct gagac 285

<210> 684

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-D2

<400> 684

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accgccacat cagccatggg cgcttgcgca accaagccca agacgcttga ggggcaggcc 120
ccagctgagg ccgccgtctc cacaccaag gttgcgcccg aggccactcc aatctccgtt 180
gaggttgcgg ctgatgaaca ggtagctgag aaggtggtag tggaggagcc ggctgcggcg 240
gccgacgttg atcatcacia ggctaataag gtggtcgctc cacaggcgga cgtcgccgag 300
cccgatcaca aggatgagga agccgtggag aacaccgtcg tcgacgacga gaatccagcg 360
gcagccgcca atgcagagga aaaggtcgcc accgccgccg agaccacgac g 411

<210> 685

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-D3

<400> 685

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taagagccag ccagagaaac taataaaact ctgcgcccg ccatccgagc gaacaagcca 120
accgaccccg tcccgaaggc aatccgccgc cgacgtacca ccaccaccgc aggagcgaga 180
tggagatgaa gaggatcctc ttcgccgtcc tcgtcgatcat cgccgcctcg gccaccgcag 240
tgctggcctc caccgaggcc gccgccgcgg gcgccccaac tgctccgag tcgtccgccg 300
aggctcccgc tggcgctggc gctggcgctg ccgctggcgc cgccgcgcgc gggccctccg 360
ccagcagcgg cgcgccgcc ctgcgcccg cgcgccgcgc gctcctcttc tccctcctcg 420

cctactaact ccactaagcg tgtgcgtgc

449

<210> 686

<211> 426

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-022-Q1-E1-D4

<400> 686

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gaggaggacg ccgtggctgc gactgcgact gcgcctgcgc cggcgtcggc gtcggcgctcc 120

tttgggctct tctccgggga gttcctccgc cggcacgggc tgcacctcct gggcacgtcc 180

tcgacgtggt tctgtctgga catcgcttc tactcgaga acctgttcca gaaggacatc 240

ttcagcgcgg tgggggtggat cccaagggc gcgacgatga acgcgctgga ggagctgttc 300

agcatcgcg cggcgacgac cctgatcgcg ctgtgcggca cgggtgcccg ctactgggttc 360

acggtggcgc tgatcgacgt gttggggcgg ttcgcatcc angtgacggg gttcctgatg 420

atgacg 426

<210> 687

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-D5

<400> 687

ccacgcgtcc gcccacgcgt ccggcaggat ctaagcaaag acttgattta gttatggacg 60

gattggtagg cctcttgaaa gttcgcgtgg tccggggtat caaccttgcc taccgcgacg 120

caagaggcag cgatccgtat gtcgtcctac ggcttgcaa gaagaaactg aagacaagcg 180

tgaagaagag atccgtgaac cccatatggc aagaggagct aactctgacc gtcacagatc 240

ccagccaacc actgaagctg gaggtgttcg acaaggacac cttcagcaga gacgacccca 300

tgggagacgc ggaggtggac gtggcgccac taatggaggc ggtgagcatg aacccgcggg 360

aggagagtct gaggaacggc gccatcatca ggtccgagcg gccgagcgcc aggaactgcc 420

<210> 688
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-D6

<400> 688

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 acttcacagg cccttgcaag ggcgacgtga ccatccacgt ggatggcaat ctgctggcga 120
 ccacggacct aaccagtag aaggaccatg gtaattggat cgagattcta cgtgtggata 180
 acctgggtcat caccggcaac ggaaaccttg acgggcaggg cccagccgtg tggagcaaga 240
 actcctgcat caagaagtac gactgcaaga tccttcccaa ctgcgtggtg atggacttcg 300
 tgaacaacgg ggaggtgtcc ggggtcacgc tgctcaactc caagttcttc cacatgaaca 360
 tgtaccggtg caaggacatg ctgatcaacg acctgaccgt gac 403

<210> 689
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-D7

<400> 689

ccacgcgtcc gcggacgcgt gggcgacgc gtgggtgagc ctccgtttgc ggtgcgacag 60
 ctctccagg accggccccc gcgcgcgtgc cgtacgtgcc agggacgacg cggggcggcc 120
 gatggagttc acgtcgtcct acttcacgc cttcggcaac cccgacctcg cggcggtggt 180
 ctccggcgac ggcggcagcg cgcaggcca ccggccgcgc cgtccaccg acggcgcgaa 240
 ggcggaggac ggcaggagcc ccaccaccac aacggcgagg cgcgcgccgt ccatgttctg 300
 cgtccccgac acggaggcgg aggagcccaa cggcttcttg gacgagtga ccctctgccg 360
 caaggcgctc tgcggcgaca tcttcatgta cagatgggac acgccattct gcagcgacga 420
 ttg 423

<210> 690

<211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-D8

 <400> 690

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 ccagctcgcg aaaataatga agagccgcag catggcatca tcggccgcgc tcttggtgct 120
 agccctcgcg ctagtggcgg ccaccgcccc acaggtagcg gaggcaaaga agaagagagc 180
 ggcggagagc ggcgaggcgg cggaggcgaa gaagatccag gacgacttct gctcgacgct 240
 gtgcgagggc aagaagggga cggacctggt cgtgtgcaag gagtcctgcg cgctctccca 300
 gcagtccaac ctggtgctgt acggcaggat ccagtgcgaag ggcaagtga ccgagcagaa 360
 gggcatcacg gcgccggcca tgaaggtctg ccaggaggag tgcgac 406

<210> 691
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-D9

 <400> 691

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 atcctagtca tccttgtgtt cctcgccgtg gcctcaccgg cggtcttggc cgccttcgat 120
 gtgatagaga tgctggccga caagcccacg tactccacgt tcctgaagct cctgcaggac 180
 accaaggctc cgggagaggc gaatcagctc cggtcggcga cgctactggt cgtccccgac 240
 aaacttgcca agcctctggc gtcgctgccc gccgataagg tgcggccggc ggtggagaac 300
 cacgtccttc tcagttactt tcgacccatc aagctggacg agatgaagac acgcaaacgc 360
 atcctcccaa cgctgctctc cgtcacgaca agaaactcgg cgtcct 406

<210> 692
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-E1

<400> 692

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tgtgagaatc atgtggctgt cgatgctggc acagggttgcg atgggttgtgg cgttgggtgtt 120
cttggtgagc ggcacatggt gcggtcctcc caaagtctcc ccaggcaaga acatcacggt 180
cacctatggc aaggactggc tggacgctaa agcgacatgg tatggcaagc cgacagggtgc 240
cggtcacgat tacaacggtg gaggatgctg gtacaatgac gtgaacaagc ccaccttcaa 300
tatcatgggc acatgcggca acatcccat cttcaaagat ggactgggtt gtgggtcctg 360
cttcgagatc aagtgcgata accctgtgga gtgctccggc aagctcgtgg tgggtgcacat 420

<210> 693

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E10 .

<400> 693

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tggaagaac gaggctgacg acgacaagcg cgagctcgtc ttcaaggaag acgggcagga 120
gtatgcgcat gtgaccgga tgctcggcaa cgggcggtgc gaggccacct gcgtggacgg 180
cacgcgtcgc ctctgccata tccggggcaa gatgcacaag aagggtgtgga tcgcggccgg 240
ggacatcgtc ctctcggcc tccgcgacta ccaggacgac aaggccgacg tcacacctcaa 300
gtacatgaac gacgaggcgc gcctgtctaa ggctacggg gagcttccc agacgctcag 360
gctcaacgat ggcgtcgacg tcgatgggcc cgaggacggc gaggagaacg gcgact 416

<210> 694

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E11

<400> 694

ccacgcgtcc gttcgaataa cacagggtgag cgcgacgatg ggatccctcg ttaataacat 60
catggctgtg ggcccgctcc ttgcggcgct cgtcgccggc gggctcgtgc ggcccccgaa 120

ggtgccaccc ggccccaaca tcaccaccaa ctacaacggc aagtgggtca ccgctagggc 180
 cacctggtac ggtcagccca acggtgccgg cgctcctgac aacggcggtg cgtgcgggat 240
 caagaacgtg aacctgccac cctacagcgg catgacggcg tgcggcaacg tccccatctt 300
 caaggacggc aagggctgcg gctcatgcta cgaggtgaga tgcaaggaaa aacctgagtg 360
 ctcgggcaat ccagtcacgg tgtacatcac tgacatgaac tacgagccta tcg 413

<210> 695
 <211> 440
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-022-Q1-E1-E12

<400> 695
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 gtcacctcta ccgctaacga aatcatcacc tcctccacca ccgtctatgg tcgccatccc 120
 caccacaagc aactcacct cctccatcat ctctaataag ctcacctcct cctccgatgc 180
 aatccccctcc accgctgct ccagtcagct caccaccagt acctataaaa tcaccaccac 240
 cggttccagt aagctcacca cctcctcttg gcgcaatccc ctccaccacc tgctccagtc 300
 agctcactac caccacctgt aaaatcacct cctccagcgg ctccagttag ctcaccatcg 360
 cctcctgtga aatactcttc accacctact ccagtcaact cactgccacc atctgtaaaa 420
 ttacctcctc cactagctcc 440

<210> 696
 <211> 432
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E2

<400> 696
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 cttcttcgtc gtacgccggc gtcctgcta gtgcctgccg ttgaactatc cggccaccat 120
 tgatccgacc tcccctaagc catgatgag tagagaaaaa cagtgaacgc cacctctgta 180
 ctcgccccac cttatggcgc gtcgctcctg cagtaccggc ccacgctctg cgcggcgctc 240

aggtgttacg gctgccctca aatccgtcgt cggaccattg gcactggggc aagcaaaagc 300
acggacaggt gctcggcgtg ctgcaacggc ttccgatttg cccggctaga tggaagacgg 360
ctggggagca tcttctctgg ggaacaccgc gtgtcatggg tgccttgccg aagttcaagg 420
acggcgtgat tg 432

<210> 697
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E3

<400> 697

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acgcccacca agaagcagga cgacaagccg aagccgacgc cggaggccgc caccgcggcg 120
aactacgcgt cgttgtggtc gcccaagcgc ctcatgcagc gcgctgcccg cgctttccgc 180
cgcagcaggt cgcgcgcccg cgtcaggacg gtcaaggacc tcgccgagga acgggcctca 240
gtgctcgccg ccagcaacaa ggtctccgat gaagcggcgg cggctaccgc ggtgccgcct 300
gcagggtgcca gtgccaaagac ctccagcagc aacgatgcc cgcacggcgc catgggcagc 360
gtgcaggacg agccgcggca gcagcgccac gatgactatc aacccgagat cgggtcccag 420
aa 422

<210> 698
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E4

<400> 698

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cgtgtcccct ctttctcgcc cggcaccgtc gagctcggct gtggaaacag aacaaacca 120
tcaacctagg cgaactcggc gtcggggatg gccgtgagcg acgagtgcaa gctcaagttc 180
caggagctca agtcgaagcg aagcttccg ttcatcacgt tcaagatcaa cgagcagacg 240
cagcaggtgg tggtggacag gctggggcag ccgggcgaca cctacgacga cttcaccggc 300

tccatgcccg agagcgagtg ccgctacgcc gtcttcgact tcgacttcac caccgacgag 360
aactgccaga agagcaagat cttgttcac tcctgggtccc cggacacctc gagggtcagg 420
agcaagatgc tgtacgccag etc 443

<210> 699

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E5

<400> 699

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tctctggccg tctcgccgcg gcggagaaga ctttccgcg aggcgaggc ggaggctacg 120
gcgggttgga ggccggtggc ggaggcgcg gcggcgcta ctccaccccg agcgaggcag 180
cgccatccac gcctgccgct ggggagacga cgacccttc gtcaggcggc gggtactcca 240
cccctagcga ggcagcgcca tccacgcctg ccgctgagga gacgacgacg actccttcgt 300
caggcgggcg gggttacggc ggtgcaaccg gcaaggcttc ctcaggcggc ggcgggctgg 360
accccgacgg cgaccagag gttgggctg 389

<210> 700

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E6

<400> 700

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gccgcaccac cgggtagccc aggccgcg cgcgccgt ccagctcgtc tgctgtcgct 120
cctccgtgat ggccgacgtc gacgtggacg ccaacaacga ggccgagcaa aggacgcgct 180
cggagccggg gacctccatg tcgccgtcat cggaggccga cgacgacacg gccagcagta 240
caccacacga gtccccggcg cgcgccttcg cggggcacac gctcgaggag ccgcctcggc 300
ggcgggcgcc gtccccggcg tcccgtccc ttcggatgct ccagagcgtg tgccggtcgc 360
tcccgtgct gaaccgcg tgccggcggc cgatgatgca tgccggggcg tgccc 415

<210> 701
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E7

<400> 701

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aagagtccac ataaggggaag gattgaaaag aagcggagga tcctcacgaa caggtacgag 120
ctcgggcgca ggcgcgggca aggcaccttc gcgaagggtg actacggacg gaacctcgca 180
tccggcgaga gcgtggcaat caatgtcagc cacaaggaga aggtgatgcg cttccgcatg 240
atcgatcaga tgaagcgcga gatctccgtc atgcgcctcg tcagccaccc cagcgtcgtg 300
cagctgcacg atgtgatggc cagcaggaac acgatatact tcgccatgga gtacgtctgg 360
ggcggcgagc tcttcggacg ggtcgcccg 389
```

<210> 702
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E8

<400> 702

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catcatccat gggcgctgc gcagccaaac acaccacgca tcatgagcaa gacgtagcag 120
atgccgccgt ctctacaccc aaggttgctc ccgaagcgac tccaatctcc gttaatgttg 180
ctcgctgaag aacatgtacc tgagagtgtg ctagtggaag aacctgatgc ggctgccgat 240
gttgaacatc ataaagctaa agatgtggtc gtcacacatg ctgccgtagc cgagcctcat 300
cactactgaag aagatgccgt ggagaagaac gtcgacaaag atgacaagcc agtagctccc 360
gcgaatgcag atcatcacgt cgctagcgcc gccgagac 398
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<210> 703
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-E9

<400> 703

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ggattgaaca tcttcacgtg tcacctcttc acgaggaact tatccccact tcaattcata 120
cccctggatc accctattct tgtgatgtcc cgatggttga agaggccata gacgccatct 180
gcaagagcca cggaacacca ccagatgaga agattgccat caccaaagct attataaatg 240
tatcgaatgg atccaagccc ccactctttg ctggcatcat agcacttggt atgagcatcg 300
caacgatggc cgtctgacc cgcagcatga tgctgggaa ggttctcggc gctgccatag 360
gtggagctac cctctcagaa ggtaaatcaa aagtacaaga gcgccag 407

<210> 704

<211> 416

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-022-Q1-E1-F1

<400> 704

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atgttctacg cgcgggtgct gttcctgacc atcggcttcg gcgacgacgc gtcgctgatg 180
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gaccgcctgg gccgggcgcg cgtgttctcg cagggcggta cgcagatgtt cgtctcccag 300
atcgtgggtg gcacgtgat cgcgctccag ttcggcaccg ccggcgtggg cgagatgten 360
cgctccaacg cctggctgct ggtgctcttc atctgcctct acgtcgccgg gttegc 416

<210> 705

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F10

<400> 705

ccacgcgtcc ggatcacaaac aagatggcat gtatagacaa tgcaatgaga gccttgttcc 60
 ttctagcgct cttctgcacc gtgcatgggtg agaaggcaaa gtcaaaggac aacgattcaa 120
 aagcgctccgg gcccggtggg tccttcgaca tcaccaagtt gggcgctctt ggcaatggca 180
 agacggatag cacgaaggct gtgcaggagg cgtgggcatc ggcgtgcggc ggcaccggga 240
 agcagacgat cctcatcccc aagggcgact tcctcgtcgg accactcaac ttcacaggcc 300
 catgcaaggg cgacgtgacc atccagggtga atggcaatct gctggcgacc acggacctaa 360
 gccagtacaa ggatcatggt aattggatcg agattctacg cgtggacaac 410

<210> 706

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F11

<400> 706

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 aggagagagg gacaagcttt ccggcgccga cgccgacgcg gaccggcgcg cgacacgatc 120
 cggatggatca agtgcatac accttttaggg agggcccttg gacagcagtt tgtgctgcaa 180
 attctatata gctctgtcgc agcatggcct cggatggcgt ggcacgctct tctttgggat 240
 ttcagaatgg cacaagttct agcagtgacc cagatcgtct tccaacgag ttgggcagta 300
 tgagcataac ggacgacaag gacgttgaag atattgtagt caatggcaat ggggcggagc 360
 ctggtcatat catagtgacc agcattgatg ggagaaatgg gcaggcaaag 410

<210> 707

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F2

<400> 707

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 ggatgaagga cagcgacaaa ccgttaagg gaccctcac cgtccgcctc actaccgagg 180

gaggcaccaa gtccgtctac gacgatgtca tccctgcaa ctggaatgcc aacaccgcct 240
acaccgcaa ataattaact ttagtgctga caatacttta agccgaccta tgctacctat 300
actagattgg gttggatccc aagcaatgca ttacacatgc atgcattgga ccgtgatatc 360
tatttgctac cactacccta ttacgacagt gatgctggcg ccaacaatga tgggtgtcatc 420
ctcct 425

<210> 708
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F3

<400> 708

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tgcgcgcggt atgcatcggc cgtgggcact acacccagc caaccttcag ctacaaggag 180
ggtgacccta ccgggcctac aaaatgggccc acattgcaga aggactggga tgtctgtgac 240
agcggcaccg agcagtcctc gatcgacgtc gccaaagggt aggtctctga ggatttagac 300
ccgctgcagc agacctacga gcctggcgac gccgtcatgc acaaccggct ccacgatttc 360
atgctgaact ggacaggagg gaacggcggc ctgacaatcg aagggaagaa gtacaagctg 420
aagcaggtgc actggcacg 439

<210> 709
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F4

<400> 709

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accgttcagt ctcaacttga caattttcgt agagttgcaa tagatgaaaa ttttgatgac 120
catgcaataa gacaatggga tcaacgaaat aggtcttcag agtcccttcc acataatgtg 180
tctgaagatg ctctttcttc ttttgatact tacgatgttg tttatggaga acaagatggt 240

ctaggcccaa aagcatttga tgtacatcca atatctatct tgcacatcaacc aagaaaccat 300
 atttctgata acattcagat atatcaacca aataaggagg cttcctcaga ggtctctgag 360
 gagcattgca aggaagtcca gtgcatcgaa acaaatgagc ttaagaggag tccattattc 420
 tttcctgttg atcgatatca 440

<210> 710

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F5

<400> 710

ccacgcgtcc gcttcttcgc cgtcggcatg ggcccgggca aatggacgcc agcgtcccgg 60
 agcacgtaca acctcctgga cacggtgagc cggcacacga tccagggtgta ccctagggtcg 120
 tggacggcgg tgatgatgac gttcgacaac gcgggcatgt ggagcatccg gtccaacatc 180
 tgggagaggc agtacctcgg cgagcagctg tacgtgagcg tcctctcgcc ggagcgggtcg 240
 ctcagggagc agtacaacat gccggagact agcctccgct gcggcaaggc cgtcgggactg 300
 ccaatgccgc cgtcctacct ctccgtctag agcatgcacg catctcgctc ggtttccct 360
 tccttccatc acgtgcgcac ggtgctgtat acacaat 397

<210> 711

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F6

<400> 711

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 cattgacaac gtcaaggcca agatccagga caaggagggc atccctccag accagcagcg 120
 gctcatcttt gctgggaagc agcttgagga cgggcgcacg cttgccgact acaacatcca 180
 gaaggagagc accctccact tgggtgctgcg cctcagggga ggcacgcaga tcttcgtgaa 240
 gaccctgacc ggcaagacta tcaccctcga ggtggagtct tcagacacca tcgacaacgt 300
 caaggccaag atccaggaca aggagggcat tccccagac cagcagcggc tcctctttgc 360

tggaagcag cttgaggacg ggcgcacgct tgccgactac aacatccag

409

<210> 712

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F7

<400> 712

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ggactgcgcc attgtttccg tgaacaacat ggaggagatc atgaccttgc ctgtggcacc 180

acctcaactt gacattcacg acaatccaat caaggttgcc ccatggaagg gaggcttctc 240

cttcaagaca tgtaccatca cgggggaagg gcaacatatc ttcttcggaa ggatgggcac 300

gccttccatc tactcctaca ccagattgc taaggaggtt gtgcccataa tctacgacaa 360

agggaaacatc ttcatgccca gtaatatgac tggtagacgc tgtgccactt 410

<210> 713

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F8

<400> 713

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tcaccttcgc atttcagctg agctgcctga ccgctaacgg gccagtgata ctgccagcgg 120

aggcgatcac gatttggtg gtgctggggc tcaccttcta caccttctgg tgctgccaat 180

aagggtacg agttcgaatt cctggggccg ttcttggtgt ctgtctgcct catccacatg 240

ctcttctagc accagcgtat catctgcgtg ctgggcaaga cccggaccat ggtgtaacgc 300

tgcacgcctc agctcgtctt ctccggtttc atgatctatc atcaccgaca accgcac 358

<210> 714

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F9

<400> 714

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cgacatcacc aagttgggcg cctccggcaa tggcaagacg gatagcacga aggctgtgca 120
ggaggcgtgg gcatcagcgt gcggcggcac cggaagcag acgacacctca tccccaaagg 180
cgacttcctc gtcggaccac tcaacttcac aggcccatgc aaggggcgacg tgaccatcca 240
ggtgaatggc aatctgctgg cgaccacgga cctaagccag tacaaggatc atggtaattg 300
gatcgagatt ctacgcgtgg acaaccttgt catcaccggc aagggaagc tcgacgggca 360
ggggccagcc gtgtggagca agaactcctg cgtcaagaag tacgactgca aga 413

<210> 715

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G1

<400> 715

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agcaacaagg tcaattgatc tagtttcact cgacacgac taattcatcg ccatcgcaac 120
cacttgtagc ggtattatgt atggaagaag agcgtgaata aaacactgac gaggatcagc 180
tcgagtgtt cactgaacaa gccactactt gagcccagtg cctgagcctt gtcttcacaa 240
gcagaggggt atctcctggg ttgcaaactt tccatgactc caaggcgta ctagagtgcg 300
caccagggct acctgggctg ggcgtgccgc agaggttggg cgacgacttg gtggccgaca 360
gaga 364

<210> 716

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G10

<400> 716

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cgctgccgcc gcgccccaac aagccgtcgg ccgtgccgag gttcggcgtg tgggacgagc 120
agaacgccgc gatggcggcg cagggattca cggcgcagtt cgagaagggtg aagcgccacc 180
gggaggaggc caggaccgcc cccgcgccgc ccgtgcagcc gccgaagctg ctgtcgtcgc 240
ccgaccacgc agcgccgcca cgcgcgcggc gacacgggaa ggggaaggcc aagaggtcct 300
tcatgtccag gatctacagg tgctgttcc caagggtcag agagtgagtg atccgacgat 360
ggttatacac aaccgctcag ccgtatacgg tgtactacgt gttcttcgac agagac 416

<210> 717
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G11

<400> 717

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ttcatcttcg gcaactcggc ggcgctgttc cagaactgcc tcatgacggt gcgcaagccc 120
ggggacagcc agtccaacat ggtgacggcg catgggcgga cggaccccaa catgcccacg 180
ggcatcgtgc tccagggctg ccgcacgtg ccggagcagg cgctcttccc cgaccgcctc 240
cagatcgcca cctacctcgg ccggccgtgg aaggagtacg cgaggacggt ggtgatggag 300
agcaccatcg gcgacctcat caggccggaa gggcggcg agtggatggg cgacctcggc 360
ctcaagacgc tctactacgc cgagtacgcc aacaccggcc cgggcgccgg caccagcaag 420

<210> 718
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G12

<400> 718

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ctcgctgcc gccactgcca accgccagaa cgcaggcgga gctacattcg aaccaattcg 120
acacctccag cagcggcggg ctgctggatc agtcgatgct gatcggcgac gaacacctgc 180
tgcggcccaa cccgagtatg gtcaaggctt cctccatgcc cgcgctctcc taccgtgagc 240

cggatggggtc caggatgctg ccagcccatg gcgccgggag cgacggcgac gtctcctcgc 300
 tggggcactg cctccggga caggacctcc accgtggacg aacacgaacg tgcgtacacg 360
 cggcacaaac acgatgatca tcgtctcacc atgtggttgc atgcatcggg aaac 414

<210> 719
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G2

<400> 719

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 tcccattctg atcctgtgga cagtgggtta ataatagtaa taaaaatgat aatccacctc 120
 ctctgcttcc caggcccagc agcaggagct ccccgctctc cgtcctcctc cgctctgtgc 180
 aggggtcccgg tcggacttcc tcacgaccgc cgcgccaaat cccgtctcgt tctccgttc 240
 cgctgcgcac cctcaggaat ggaacttggc gccaccactg ccctgtaccc tctgcaccgc 300
 tgcaaaacca tttaacctggt caggcatgcc cagggcattc acaacgtcgc aggcgagaag 360
 gacttcggcg cctacatgtc acatgaactg ttcgatgtc agtcaaccc tttgggttgg 420
 aaccaagtcg atggtctgcg ggagcatg 448

<210> 720
 <211> 429
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-022-Q1-E1-G3

<400> 720

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 gcaacaactc agccgccgca accgccacat cagccatggg cgcttgcgca accaagccca 120
 agacgcttga ggggcaggcc ccatctgatg ccgccgtctc cacaccaag gttgcgccc 180
 aggccactcc aatctccgtt gaggttgcg ctgatgaaca ggtagctgac aaggtggtgg 240
 tggaggagcc ggctgcggcg gccgacgttg agcatcagaa ggctaagtga gtgctcgctc 300
 cagaggcggc cgtcgccgag cccgaccaca aggaggagga agccgtggag aagaccgtcg 360

tcgaggagga gaagccagcg gcagcagccc atgcagagga aaatgtcgcc ancgccgccg 420
agaccacga 429

<210> 721
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G4

<400> 721

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gacgctggcg cagcgggaagc cgaccaaccg gtacatcagc tacgcggcg cgcgcgcgga 120
ccaggtgccg tgcaacaagc gcggccggtc ctactacagc aactgcgagg cgcagaaggc 180
cgccaacccc taccgcccg gctgctccgc catcacgcgc tgcgcccgcg acatgaactg 240
agcccagcgc tagctgctgc cggggcgcg cgctcgtcg gagccggtcg gtctggtctg 300
gtctggtctg cctgcctgcc aggtcacgca gcctgggtcc accgatcgca caccatacat 360
tgacgtcgtc gtcgcgggcg tacgtgccgt tggacggtgg aagaggcggt ggcgctacga 420
cagtatatat atacaca 437

<210> 722
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G5

<400> 722

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cgtgctagcg gtggccgccc atgtcgccaa cgccggccac gccaagcccc tgacgcctgg 120
cgggcgcgtg gtacaccaca accacggcaa gttcacggcc gggccgtgga aaccgcacca 180
cgcgaccttc tacggcgggc gggacgggtc cggcaccacg gcgggcgcgt gcgggtacaa 240
ggacacgcgc gcgcaggggt atggcgtgca gacggtggcc gtgagcacgg tgctgttcgg 300
tgacggcgcg gcctgcggcg ggtgctacga ggtgcgctgc gtggacagcc ctagcgggtg 360
caagcccagc gcggcgacac tgggtgtgac ggcgaccgac ctgtgccccg ccaacgacca 420

gca

423

<210> 723
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G6

<400> 723

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ctgagcgtgg ccctagtggg cctgtctctc tgccacctcg ccaccaccgc ctccgcccac 120
cagaaagaca tccacgtcct cggcagcgtc gacgggtcca gcgacggcag cagccccgag 180
tccgaaggcc gcgtcgtcta cgcgacatg aagctggctg atacggaatc cgatgcgccg 240
gcgccggcgc cggcgccggg gccgtcgtcc ggttgaactg agaagcgtgc gtccagccaa 300
gcaaggtggt caaaaccgag aactaattaa gggctcgatt gtgtgtccgg ctactactgt 360
tcttgccata attatatata gatacgcaaa gtgtggccaa gcctaccac atgcatgcta 420
ttgca 425

<210> 724
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-G8

<400> 724

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cttttcctcc gacatccaca aggggggagg ggaaaacacg tacattcacc cggcggcaat 120
aatggcctcg gttccggctc cggcgacgac gaccgccgcc gtcacacctat gcctatgcgt 180
cgtcctctcc tgtgccggcg ctgacgaccc gaacctcccc gactacgtca tccagggccg 240
cgtgtactgc gacacctgcc gcgccgggtt cgtgaccaac gtcaccgagt acatcgcggg 300
cgccaagggtg aggctggagt gcaagcactt cggcaccggc aagctcgagc gccccatcga 360
cggggtcacc gacgcgaacg gcacctacac gatcgagct 399

<210> 725
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-H9

<400> 725

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 ctggttgacg aggggttcgc cgtcaggcgc cagaccagg aagcgttgta ctgcatgcag 120
 atgatgacga ggatccagac tcagctgtac acgagacggc tcaagaccga gaaggacaag 180
 aaggttctca agagtcagac caaggccgtt aataaacata gcctggacaa agcaaagatt 240
 ggtgaaggct gggatcatag cctgcagtcc aaggagcaga tggaaacggt gcagaagatg 300
 aagcaggaag ctgctacaag gcggcaaagg gccttgatc acgcattctc tcaacagtgg 360
 aggaacagga acacctcttc tgcgcgagct gcgcatgggc ctgctcccat gtacatggga 420
 cctggcaa 428

<210> 726
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-A1

<400> 726

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 gcggcgctcg cgccggcctc gtggcctgtg ggatcgtgat ggggaccatg tccaacgcca 120
 acaacctgat gcaggacctc aagacggggt acctgacgct gacctcgccg cacaccgtgt 180
 tcatcagcca ggccatcggc acggcgctcg ggtgcgtcgt caaccgggtc atgttctggg 240
 ccttctacag ggtggtgcag aacggcgaca ccgacgtctt cgacgcgccc tacgcccagag 300
 tgtaccgcag catcgccatg ctgagcgccg ggcaggacgg gataccaatg cacagcctct 360
 ggctctgcaa gctcttcttc gcgctggcgc tcgctgctca cgtg 404

<210> 727
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-A2

<400> 727

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caagggaac cttgacgggc agggcccagc cgtgtggagc aagaactcct gcaccaagaa 120
gtacgactgc aagatccttc ccaactcgct ggtgatggac ttcgtgaaca acggggaggt 180
gtccggggtc acgctgctca actccaagtt cttccacatg aacatgtacc ggtgcaagga 240
catgctgatc aaggacgtga ccgtgacggc gcccggggac agccccaaca cggatggcat 300
ccacatgggc gactcatccg ggatcaccat caccaacacc gtcattggcg tcggcgacga 360
ctgcatctcc atcggccccg ggacctcaa ggtgaacatc accggcgtga cctgtggccc 420
tgccacggc atcagcat 438

<210> 728

<211> 391

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-017-Q1-E1-A3

<400> 728

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tggggccgcc agcaggttca gccgttctg ttcttgataa aacgagagaa ggatggcagt 120
gtttcaggga gctgtcctat tcttgtttct cctcctcgtc gcagcagagg tgggaaccat 180
cgatgccaaa atgggagtag ccatgcccat gcatgccttg ataatggaga aagcgaaaca 240
gcaggagacg gagaagaagg aggagaaaag cacggagaag gaagagagtc aatgcttatt 300
gccgagtctc cagttcgagg gcttctgctt caacagcgac agatgcgccg aggtgtgcat 360
gaaggagagc tttcncggtg gcgagtgcaa g 391

<210> 729

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-A4

<400> 729

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gagagccttg ttcctcctgg tcctcttctg catcgtgcat ggtgagaagg aagagtcaaa 120
gggcatcgat gcgaaagcgt ccgggcctgg tgggtccttc gacatcacca agttgggcgc 180
ctccggcaat ggcaagacag acagcacgaa ggctgtgcag gaggcacggg catcggcggtg 240
cggcggcact gggaagcaga caatcctcat acccaagggc gacttccttg tcggacaact 300
caacttcaca ggcccttgca agggcgacgt gaccatccag gtggatggca atctgctggc 360
gaccacggac ctaagccagt acaaggacca tggtaatgg atcgagattc tacgcgtgga 420
taacctggtc atc 433

<210> 730

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-A5

<400> 730

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tgtttgggca atctggtgct ggtaacaatt gggctaaggg ccactacacc gagggtgctg 120
agctcattga ctctgttctg gatgttggtga ggaaggaagc tgagaactgt gactgcttgc 180
aaggattcca agtatgccac tcccttggtg gtggtactgg atctggtatg ggtacgctgt 240
tgatctcaaa gatcagggaa gagtaccctg accgcatgat gcttacattc tcagttttcc 300
cctcaccgaa agtatctgat accgtgggtg agccatacaa tgccactctt tctgtccacc 360
agttggtcga gaatgctgat gagtgcattg ttctcgataa cgaagccctc tatgacatct 420

<210> 731

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-A6

<400> 731

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gtc gatgcgg gcacatgttg cgatggctgt ggcgttggtg ttcttgggtga gcggcgcatg 120
 gtgcggtcct cccaaagtcc ccccaggcaa gaacatcacg gccacctatg gcaaggactg 180
 gttggacgct aaagcgacat ggtatggcaa gccgacgggt gccgggtccc acgacaacgg 240
 tggcggctgc ggggtacaagg acgtgaacaa gcccccttc aatagcatgg gcgcatgcgg 300
 caacatcccc atcttcaagg atggtctggg ttgtgggtcc tgcttcgaga tcaagtgcga 360
 taagcctgtg gagtgtccg gcaagcccgt ggtggtgcac atcacggaca tgaac 415

<210> 732
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-A7

<400> 732
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 tgacggtgcg caagcccggg gacagccagt ccaacatggt gacggcgcaa gggcggacgg 120
 accccaacat gccacgggc atcgtgtcc agggctgcc catcgtgcc gagcaggcgc 180
 tcttccccga cgcctccag atcgccacct acctcggccg gccgtggaag gagtacgcga 240
 ggacggtggt gatggagagc accatcggcg acctcatcag gccggaaggg tgggcggagt 300
 ggatgggcga cctcggcctc aagacgtct actacgccga gtacgccaac accggcccgg 360
 gcgccggcac cagcaagagg gtcaactggc caggctacca cgtcatcgga c 411

<210> 733
 <211> 357
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-A8

<400> 733
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 atccttatgt ttgattgcg aaatgtgttc ggctcgactg aaacggacat gcgatcttac 120
 attcccaatg caatgctgtg gctgagatgg gttcatctgg cctccgcaaa taagccagga 180
 ttgccgttgt tccttgcag aatatcagtc gattcagcaa caactctgac aaataatttt 240

caaagagaat gaatgatcat ctcatatatg agttagacaa cagggatatg caaacgagaa 300
 gaatgacaac ttgggggacta gccaaagaaa taaatggcgc ctcaaataac ttataag 357

<210> 734
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-A9

<400> 734

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 gctatctgct aaggaatgtc gaccggttta gataccttct accgggcaac tgcaggagag 120
 aaagtggcta gggttttatgg ccactaccc tgcaacctgt tgtgcgtggg tgggtgggtg 180
 ccagtgccac actgccccgc tgcaaagctg ctgtccatgg gatatctgtg gcagttcacc 240
 tggtagcgtt gcctaacgta gttgaacaaa tgctttgggg aagaattggt tcatggatgg 300
 gggtagcac atgattctct aatgtgtaat agaacatggg aggaggatct aacggcatag 360
 cgcacgcttg gtcctggctg ggtgtgcatg agctgagcgg tttgtcattg tcattcatta 420
 cttccctgat tgatatatat aaactca 447

<210> 735
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-B1

<400> 735

ggtcaggatc acgcgggtcg acccagcct ctacacacac gttcctctaa gatgaattga 60
 ttgctctgaa tgcttggcgt cgtataggtc gccaaacaag agaagctatt aagaaaaaat 120
 ttctacctga tctacttcaa atatatgaag aacagggttag ggccttcatt gaaggtagtg 180
 gtgacagcga cgtgcttggt ctgaatgtcc aggaccggtt ccagaggctg cttctgcacg 240
 gtgtttgtga gttctataac gtaacctcaa tgaccacaag cagtgtgaagg gacgggaagc 300
 catggaagag caccaccatc aagaagaggc atgtcaccgg tcttctcccg agaatacat 360
 tagttagctt cctgaggatg aggaagaatt agtcgtccca gtaacatgtg gatgtgaggg 420

<210> 736
 <211> 445
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-017-Q1-E1-B10
 <400> 736

ggtccggtaa tcacgggtcg acccacgcgt ccgggagggc aatgacgagg gcccaggaga 60
 ggcggccatt gaagaaccag ttggttctct tggctcaatg tcgctctgt cgcatctatt 120
 catgtataat ccagaaatgg aggatggcaa tgacgaggac tcaggagagg aggcggccat 180
 tgaagaacca gttggttctc ttggcgcaat ggcgctcta ttcattgatg atcaagaaat 240
 ggaggacaac gaggaggatc aggcacacta gatgcagatt gcaccagctt caccgaacct 300
 tttgttttgt gtgcgggggg gctctactta tgtaatgtgg aatggaagga ttgcgcaagc 360
 ttaaaagtat ggctggatcg gccttgtttt ttaactggtt ccctagttac tgccatctaa 420
 tagccaacat ttttcccgt tttgt 445

<210> 737
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-017-Q1-E1-B2
 <400> 737

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 caccaagctc aacaacagcc agctcgcgaa aataatgaag agccgcagca tggcatcatc 120
 ggccgcgctc ttggtgctag ccctcgcgct agtggcgggc accgccccac aggtagcgga 180
 ggcaaagaag aagagagcgg cggagagcgg cgaggcgggc gaggcgaaga agatccagga 240
 cgacttctgc tcgacgtgt gcgagggcaa gaaggggacg gacctggtcg tgtgcaagga 300
 gtctgcgcy ctctcccagc agtccaacct ggtgctgtac ggcaggatcc agtgcaaggg 360
 caagtgcacc gagcagaagg gcatcacggc gccggccatg aaggtctgcc angaggagtg 420
 cgac 424

<210> 738
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-017-Q1-E1-B3

 <400> 738

ggtcaggaat acncgggtcg acccacgcgt ccggtgagaa gttgggtcct aagtatgctt 60
 catttccaac tgacaagctg atggagaacc ctgatttcta tagtgatctt ctcagagaaa 120
 accttgatat aagggtcagg ttggtgggta actacaatgg ccttagcgtt ggtgcagtgc 180
 gagatgtgtt tgagaagtcc cttggcctgc ggctgcagaa gatgaatcct aacacagact 240
 ttcactgctt gaagaccttt ggttctcact tcacagaaga tatcgctata ctttcgggta 300
 cgaagattga cttctgtcaa acatcagatg ggaagcttat aacagaaatt gatgggaaac 360
 aaattgggtgc tgttcggagc aaagatcttt gcaaggcttt cttcgacatg tatattgggtg 420
 attcaccggt ttc 433

<210> 739
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-017-Q1-E1-B4

 <400> 739

ggtcaggaat atccgggtcg acccacgcgt ccgcccacgc gtccgcccac gcgtccgtgc 60
 taaaacgaga gaaggatggc agtgtctcag ggagctgtcc tattcttggt tctcctcgtc 120
 gcagcagagg tgggaaccat cgatgccaaa atgggagtag ccatgcccat gcatgccttg 180
 ataatggaga aagcgaacaa gcaggagacg gagaagaagg aggagaaaag cacggagaag 240
 gaagagagtc aatgcttata gccgagtctc cagttcgagg gcttctgctt caacagcgac 300
 agatgcgccg atgtgtgcat gaaggagagc tttcccgggtg gcgagtgcaa gcaggtcgtg 360
 gccacgcgca agtgcttctg caagaagcct tgctagtcca tcggtcttgc taattgttga 420
 tgggtgcttc attaatattga 440

<210> 740
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-017-Q1-E1-B5

 <400> 740

 ccacgcgtcc gccacgcgtc cggctggcgc tgccgcagag actgggcgac ggaccggcag 60
 cgcttggccc gttgcgccag aggtctcggg caccgcacca ccggcggcct cggcggcaag 120
 atctacgtgg tgaccgaccc caccgacctc gacgtggtga acccgcgccc cggcacgctg 180
 cgctggggcg tcatccagcc cggcccgtg tggatcatct tcgcgcggtc catgatcatc 240
 cagctctcgc aggagctgct catgagcagc gacaagacca tcgacgggcg cggcgcgcag 300
 gtgcacatcg ccaacggcgc cgggatcacg gtgcagctgg cgaaaacgt catcatccac 360
 aacctgcacg tgcacgacgt caagcacacc atgggcggcc tcatgcgcga ctcc 414

<210> 741
 <211> 405
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-017-Q1-E1-B6

 <400> 741

 ccacgcgtca gctttcgcgc tgtccggaga ggaggggcag gatgaggcag caccaaactc 60
 atctggggat ctgagcgcgg ggcacaagat gacacgcgga ggcaagcccg cggcttcgtc 120
 aaagccgaac ccgttcgact cggactcgga caccgagtca agcaataagc cggcgaacaa 180
 gtccggggcg tcgtcgtacc agggccccgc cgactccaag aagcgggtaca aagactgggt 240
 cagggactcg ggcaggctgg agaaccaatc ggtgcaagag ctggagcact acgcggcgta 300
 gaacgccgag gagacgacgg acgcattcgc ctgctgcctg cgcacgcgcg aggacatcag 360
 gcacgacgcc agcgacacgc tgatcacact gcacaagcag gggga 405

<210> 742
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-B7

<400> 742

aggtaacggt caggaattcc cggctcgacc cacgcgtcag tgaacatcta cactatgata 60
agttctctag ttttttgaaa caattgcatg atgagattgt ccgcttggag ttcagtcact 120
acgatttgaa atcatcgaac acaatatctg caaaggactt tgcgttatct atggttgctt 180
ctgctgatat gaatcacata gacaagttat tggatagagt tgatgatttg gatgacaatc 240
ttgacctcaa ggatctgcgc attacctttg aggagttcaa ggcatttgct gatcttcgaa 300
gaaggttgga accatttgca atggctatct tcagctatgg caaagtaa at ggtttgttga 360
cgaagcagga tctaaaacgt gctgcatcac atgtttgtgg agtggacttg actgacaaag 420
tagtggacat aattttccat 440

<210> 743

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-B8

<400> 743

ccacgcgtcc gcggacgcgt gggcggcaga ggcctcgtgc agaggatgcc aagggtgccgc 60
tggggcttct tccacgtggt caacaacgac tacacgcact ggctcatgta cgccatcggc 120
ggcagcaagg cccccacat catcagccag ggcaaccgct acatcgcgcc gcccaacctt 180
gccgcgaagc aggtcaccaa gcagcatgac acgccggagt cgggtgtggaa gaactgggtg 240
tggcactccg agaacgacct cttcatggaa ggcgcctact tcaccgtcac cggcggccag 300
attaacaggc agttcaacaa gaaggacctc atcaagccca ggaacgggtc ctacgtcacc 360
aggctcacgc gctacgccgg ctccctcgcc tgcacgcccg gcaagccctg ct 412

<210> 744

<211> 478

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-017-Q1-E1-B9

<400> 744

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caggaaggag aaatggcttc cgcacacaac gctctccggg tgtttttcat cctagccgtg 120
gtatgtgccg tatgcacagc gaaaaggaca ggagccaaga aggaagaatc ggcggcagcc 180
cctggtggtg ctgctggagg cagcggcggg acgttcgaca tctccaagct cggcgcgacc 240
agcgacggca agacggactg cacaaggca gtccaggacg cgtggacgtc agcgtgcgaa 300
gcgaccggaa gcgccacggt ggtgatcccc aagggcgact acctggtcgg ccctctcaac 360
ttcactgggc catgcaaggg cagcagcatc gccatccagc tggatggcaa cctgctggga 420
tcaaacgacc tgaacaagta cacngcgagc tggatcgaat tgtctcacgt taacaaca 478

<210> 745
<211> 429
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-017-Q1-E1-C1
<400> 745

cggtcaggaa taccggggtc gaccacgcg tccgccacgc gtccgcggac gcgtgggtgg 60
gagccgagaa ggcgcagggt atgctgctca aggagatcgc gcagaagctc tgcaaggaca 120
cgacaccacc agttccagcg gcagcagtgg ctcagcacag cttttacaaa gggggcaaca 180
cacagccggc catgaccatc actgtgcgac caccacggca cccggctttg cttatgcaaa 240
ggaaactggt gaagaagaag ccatcactcc ttgctgcagt ggtcaagtgg gttacatcaa 300
tcatgtggtg gcgaaggaaa tcatcccgcg tcaagttccc tattgggcag tgcggcaaca 360
acgtggggct gcttctgctg ctcgacaagg ctcccagggc aggccacggg caccagaggc 420
cctcccaag 429

<210> 746
<211> 475
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-017-Q1-E1-C12
<400> 746

cacgcgtccg gaaacaggca cacaagaaca aatacctcgc taccaacaat ggctccagg 60

tccatccatcc	tacttgcaac	gtcgatgctg	gctgcgctgt	ttgcggttgg	tttgtgcacc	120
accccgctca	ccttccaggt	tggcaagggg	tccaagcctg	gccacctgat	cctcaccccc	180
aatgttgcaa	ccatatccga	cgtggagatc	aaagagcacg	ggggcgatga	cttctccctt	240
acgctcaagg	agggcccaac	gggaacttgg	acgctcaaaa	caaaggcccg	ctcaagtacc	300
ccctttgcaa	ccgctttgct	gtcaagtccg	gttgctaccg	catcgctgac	gacgtcatcc	360
ccgctgattt	caaagccggc	accacctatt	agaccacact	cagcatctaa	tcagcctctg	420
atgatgaatt	atatttcaaa	agagctcaac	tggtgctcat	gtagcaaga	caata	475

<210> 747
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-C2

<400> 747

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cctctcctgt	tgtegtgct	ggtcgccatg	ctagcggtgg	ccgccgatgt	cgccaacgcc	120
ggccacgcca	agcccctgac	gcctggcggg	cgctggttac	acgacaacca	cggcaagtgc	180
acggccgggc	cgtggaaacc	agcccacgcg	accttctacg	gcgggcggga	cgggtccggc	240
accacggcgg	gcgcgtgcgg	gtacaaggac	acgcgcgcgc	aggggtacgg	cgtgcagacg	300
gtggccgtga	gcacggtggt	gtttggcgac	ggcgcgccct	gcggcggttg	ctacgaggtg	360
cgggtgcgtg	acagccccag	cgggtgcaag	cccgcgcggg	cggcgctggt	ggtgacggcg	420
accgacctgt	gcccccccaa					440

<210> 748
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-017-Q1-E1-C3

<400> 748

gtcaggaata	cccgggtcga	cccacgcgtc	cggcaacatt	ggaggaaaag	cgggagggag	60
------------	------------	------------	------------	------------	------------	----

tggaaatgca tataactggag ctgatgcagg tacaagtgtt tcaggtggag gatccggtgg 120
 cgccagtgca ggtaccagtg ctaccgtggg tgctggtgtc tccggaggtg ccaaagttgg 180
 tgggtggcgta ggaggaaatg caggaggaag tggcaacgtc tataactggaa ccggtgccga 240
 tgcaggcggtt tctggtggag gatccggtgg cgccgacggt ggtattggag ctaacatang 300
 tgctggtgtc ttcggaggcg tcaaatttgg tggcggcgcc ggaggaagtg tangaggaag 360
 tggcagtgtc gctgcangtg cttctggang gagtanatca tcggggggtg gctcagattt 420
 tggatatggt tc 432

<210> 749

<211> 436

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-017-Q1-E1-C4

<400> 749

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 ggcgggtgcg cgtcgccggc gtcggtctcg aaccgccaac tggcgccgtc cggccgtttc 120
 gaccgtgcbc gcgcccggc gcagtcggcc atcgctccacg tcgccgaggt cgccgcgtac 180
 cgctcgtct tcctggactc gcaccactcc ttctacggcg ggctctacgt cgggggcgtc 240
 gccgacgcc gcacccgcc cgcgctccgc gcgctgaagc agaacctgtc gctgctcgtc 300
 tccatcctcg tggaccgcgc gcagccggtg gccgtccggg aggtgatgaa ggctcgttc 360
 caggggttcc tcacgtcct gctcgccggc ggcagcgaca ggagcttcac ggtggangga 420
 cacgcgatgg tcgaag 436

<210> 750

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-C5

<400> 750

ccacgcgtcc ggtcctcttc gatcccgctc aatccccgc gcccggcgc ccctctccgc 60
 cggcggttt gctgggtccc gcgctcctcc tcctcctagg ctgttctggt tggggctgcg 120

gcggagggaa ctaggtaagg gggaaggaaa ggggaggttt gagggagagc gcagcggcag 180
cggcagcagc gatgccatcg cacgcggatc tggaccgcca gatctcgag ctgcgggatt 240
gcaagttcct gcctgaggcg gatgtcaaaa cgctatgcga gcaggccaag gcgatcctca 300
tggaggagtg gaacgtgcag cccgtgcgtt gccccgtcac tgtctgcggc gacatccacg 360
gccagttcta cgacctcatc gagctctttc gcatcgggtg cgacgcgccc g 411

<210> 751
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-C6

<400> 751

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ttcgacaagg acggcagcgg gtgcatctcc aaggaggagc tggagcaggc gctcaaggag 120
aaggggctcc tggacggcag ggacatcaag gacatcatct cggaggtcga cgccgacaac 180
gacgggagga tcgactacag cgagttcgtg gcgatgatga ggatagggac cgccgagccg 240
aaccccaaga agcgggcgca cgtcgtgttg tagccttgtt aggagcatgc gtagatgtag 300
ctgctgatat atggtatggt atatcggatg gtaaaatgga acggcgtcca gcagttgatg 360
ccattgccac gacagtgggt gcttgacgcg tggtcgagca gcacaaggcg cgcg 415

<210> 752
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-C7

<400> 752

ccacgcgtcc gctaaacccc tcgacgcagc cgccgccggc gtaggggaga ggggcacggg 60
cacggcacgg ggacggaaat. ggcgaggagg aacggcgga gtcgcgccga ggctggcgtc 120
cgcgagtcct ccgagccctc gccgaagcgc tcctcgatcc ccgccatgcc gcacgaagaa 180
tgcgtcgagg gcatccgctc cgcgctcaaa catcccacgg tgcggttcct gagggagcgg 240
atggagagtg ccgggtgcct ggtgtggccg cgcctcatcc gggcggcgac ctgctcctcc 300

gccggcggct acgctagcca gcaagggata caagtttgct gcaatcacat gacctgtcaa 360
 gatgagataa ctcaggatcat gattcatgaa ctgatacatg cttatgatga c 411

<210> 753
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-C8

<400> 753

ccacgcgtcc ggggcctttc cctcccatat actcgccgtc ggccagcgga tctaatacggg 60
 gcggggcgga tggctgggca gaaccagcgg ctcaacgtcg tgccgacggg gacgatgctc 120
 ggcgtcatga agggccggct cgtcggcgcg acccgcggcc acgcgctgct gaagaagaag 180
 tccgacgcgc tgacgggtcca gttccgcgcc atcctcaaga agatcgctcg cgccaaggag 240
 tcgatgggcy agacgatgcy cgctctctcc ttctccctcg ccgaggccaa gtacgtcgct 300
 ggcgacggcy tccgccacgt catctccag tccgtccgcy cggcatccgt ccgcgtccgc 360
 tcccaccagg agaacgtggc cgggggtcaag ctccccaagt tcacccactt cgtcgac 417

<210> 754
 <211> 484
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-C9

<400> 754

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 ccacccatcg aggttggggc cgccagcagg ttcagccgtt cctgtttcttg ataaaacgag 120
 agaaggatgg cagtgtttca gggagctgtc ctattcttgt ttctctctct cgtcgcagca 180
 gaggtgggaa ccatcgatgc caaaatggga gtagccatgc ccatgcatgc cttgataatg 240
 gagaaagcga aacagcagga gacggagaag aaggaggaga aaagcacgga gaaggaagag 300
 agtcaatgct tatcgccgag tctccagttc gagggcttct gcttcaacag cgacagatgc 360
 gccgaggtgt gcatgaagga gagctttccc ggtggcgagt gcaagcggga cgtggccatg 420
 cgcaagtgct tctgcaagaa gccttgctag ttcatcggtc ttgctaattg ttgatgggtg 480

cttc

484

<210> 755
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-D1

<400> 755

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ccgcgcctcc tctcacctt cctgctcgcc gcggcgccg tgctgaccac ggtgcccggc 120
gtcgcgctcg ccaagtcgaa gctcgccaag aagagcgacg acgtcgtgaa cgggcccctc 180
ctgaccgaga agatccaggc gaagaagacg ctgatcgtgg ggccggacga ggagttcaag 240
accgtgcagt ccgccatcga cgcggtgcc gccggcaacg ccgagtgggt catcgtccac 300
ctccgctctg gcctgcacag gggcaaagtt gtgataccgg agaacaagcc cttcatcttc 360
gtgaggggca acggcaaagg ccggacctcc atctcccacg agtccgcctc ttccgacaac 420
gccgagtcgg ccgcg 435

<210> 756
<211> 148
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-D11

<400> 756

acaaaatgca gggcttttgc ttccaagaaa acaagggcac cataacacaa aaccgttccc 60
aacacacaag caaggattct acgaccacg ggcgtgcacg agccgatgag cccctgcaac 120
tttcaagtgc aaccgccggg gctgtttc 148

<210> 757
<211> 460
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-017-Q1-E1-D12

<400> 757

gggtcgacgc acgcgtccgc ccacgcatcc gctatggggc aagcctaccc acggcttgtc 60
ctcctcgccc tcgtggcggt gttgtctgcc ggctctctcc cgcangcgtt agggaaacggc 120
aagggcaagg tgcattggcg cggtgccgtc aaccgcgtgg ttgccggcat ctgctctcgc 180
gccccattcc cagaggtttg cacggccaca gccggggccc atgcatcaa gtaccgcgtc 240
atcgacaatt tggccgtgct gaacatgcag gtggccgcgt tcgccaagcg cacagcgcag 300
gcgcggaagc acgtcgcggt ggccggccgc actattccac cgccgcaggc acaggccctc 360
aggacctgcg acacgatgtt catgaacacg caagacgcca tccggggccgc gcagcgagcc 420
atcgcgttca aggacacggg caccgcgaag atcatgctgc 460

<210> 758

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-D2

<400> 758

aggtcaggaa caccggggtc gaccacgcg tccacgataa gacggcgtag acaaacaatg 60
cgatgagagc cttgttcttc ctggtcctct tctgcatcgt gcatggtagag aagggaagagt 120
caaagggcat cgatgcgaaa gcgtccgggc ctggtgggtc cttcgacatc accaagttgg 180
gcgcctccgg caatggcaag acagacagca cgaatgctgt gcaggaggca tgggcatcgg 240
cgtgcggcgg cactgggaag cagacaatcc tcatacccaa gggtgacttc cttgtcggac 300
aactcaactt cacaggccct tgcaagggcg acgtgaccat ccagggtggat ggcaatctgc 360
tggcgaccac ggacctaaag cagtacaagg accatggtaa ttggatcgag attctacgcg 420
tggataacct ggtcatc 437

<210> 759

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-017-Q1-E1-D3

<400> 759

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acggaggcgg cggcagcggc agccccgagg cggccggcag caacgccagc ggcgcggcgc 120
gtgggtacag cggcatcccc gggatccccga tgggcggcct cgcgtccggc gcctggccgg 180
acgaggcgtc gccgtcgccg acgtccggcg cgaagcgccc ccgcgactcc ggccccgcgc 240
tgcagcagcc gctggcgccg cagctcagcc tgcccagcgg aaagaacaag ggcggcaggg 300
cggcctcggc ggagatggcg gcgatcgaga agttcctcca gttccaggac gccgtcncct 360
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<212> DNA
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<223> Clone ID: LIB148-017-Q1-E1-D5
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<210> 762
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 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-D6

<400> 762

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 gcacagaccg ctctctatct gttcgtgggg atgtaactgt aagccttggt acccctaagc 240
 agtctgcgtc ttgtgcctgc tgctgtagcg gtagagcaga gagagagatc aaatgtaaatt 300
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<210> 763
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-D7

<400> 763

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<212> DNA
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 cggaggaaat gctagtgcct gtgcagctct aggctgcagc ttatcatcatt ggcgatcgat 180
 cgtaacaatg caaggttgtg ttgtatataa ctcttgtgtt tggaatgccg cccgtaatta 240
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 <212> DNA
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 ctgtgaatgt gacaaaacct tcaccaacaca agctgctggt tctaggagga agtggtttcg 240
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<210> 766
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 <213> Zea mays
 <223> unsure at all n locations
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 <400> 766

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 caccgccgca ttaatagttt accttccttc gatcgggtcat tctttcaaga ccgtagctgt 180
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<210> 767
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 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-017-Q1-E1-E3
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 gacgaggcca gtggtgacgc cccagagggc gcagaagagc ttgaccctgc gctcgaagag 180
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<210> 768
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 <223> Clone ID: LIB148-017-Q1-E1-E4
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 <223> Clone ID: LIB148-017-Q1-E1-E5
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 gcgaggtggt cttggtggag agcccgcgca aggactgcga ccaggtgcag gcggacaggg 240
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<210> 770
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 <400> 770

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agatcccagc caaccactga agctggaggt gttcgacaag gacaccttca gcagagacga 360
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<210> 771
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-E8

<400> 771

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<210> 772
<211> 296
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-E9

<400> 772

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cgtctccaca cccaagggtg cgcccgaggc cactccaatc tccgttgagg ttgcggctga 180
tgaacaggta gctgagaagg tgggtggtgga ggagccggct gcggcgggcg acgttgagca 240
tcagaaggct aatgaggtgc tcgctccaga agcggccgct gccgagcccg accaca 296

<210> 773
<211> 329
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-F1

<400> 773

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tggtagcggc ggtggttctg tgctctctgt tagcgacagg gccgcagggg gccatcaccg 180

tcgaggggat ggtgtcattt gactacttga tcagctgcaa ggtactgggc aactgcgagt 240

cgaacctgtg ccccgaggcc ctccgcccag ggaataccgc caccgactac acgacgcagc 300

tgcacgcgta taccggctgt cacggctga 329

<210> 774

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G5

<400> 774

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cgacagcccc aacacggacg gcatccacat cggcgactcc agcaacgtga ccatcagcag 180

caccaccatc ggcgtcggcg acgactgcat ctccatcggc cccgggagca agatgatccg 240

catccatggc gtcaagtgcg gccacggcca cggcatcagc gtcggcagcc tggggcgcta 300

caaggacgag aaggacgtgg aagacgtgca ggtgacgggg tgcacgatcg ccggcaccac 360

gaacggcctg cgcacaaagt cgtacgagga ctccaagtcg tcgctcaag 409

<210> 775

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G7

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<210> 776
 <211> 346
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G8

<400> 776

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 agcgacatgg tatggcaagc cgacgggtgc cgggtcccgac gataacggtg gcggctgcgg 240
 gtacaaggac gtgaacaagc ccccttcaa taccatgggc gcatgcggca acatcccat 300
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<210> 777
 <211> 374
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-010-Q1-E1-H10

<400> 777

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actgtcgaac tatttggacg aaagttgtac actgcagtat gatgtaacca tcaaaatctn 360
ccctacattc gcct 374

<210> 778
<211> 441
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H11

<400> 778

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ggtcgccgcc gtggccgtag ttctggccgt ggcgggcggc tcgtccctgg ccggcggtggc 180
gtccgcggag aaggcgggcg ggttcgtggt gacggggcgc gtgtactgcy acccctgccg 240
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<210> 779
<211> 424
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-010-Q1-E1-H3

<400> 779

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actg 424

<210> 780
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H5

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tcggcgcggtt cagcttctgg ccgctcac 448

<210> 781
<211> 201
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H6

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<210> 782
<211> 144
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H7

<400> 782

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<210> 783

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H9

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<210> 784

<211> 357

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-A1

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agcacgacgt gatcatgctg aggcggacga ggagcgggcg ggcattcccg ccgccgatct 300
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<210> 785
<211> 437
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-011-Q1-E1-A10

<400> 785

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<210> 786
<211> 356
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A12

<400> 786

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<210> 787
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A8

<400> 787

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gccagaatat tacttaccct gcttcattta ccaaatagaa gttcctggat gcattttgcc  420
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<210> 788
 <211> 338
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B10

<400> 788

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taccatcgcg ccaagccgag aagaaagatg gagatgatca aaaggatcct catcgccgcg  180
ctcctcgtag tcgctgtctc ggccaccgca gtgctgggct ccaacgatgc cgcagccgcc  240
ggcgctccag ccgcatccga gtcctctgcg tcagttgaag cccccgctgg tgccgccggg  300
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<210> 789
 <211> 121
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B11

<400> 789

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<210> 790

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B12

<400> 790

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cttctgctgc gttaccatgg gccaaacagc gaggaatatg ccgagagaga ggtagagaca 180
gtttggtcgt cgagtcacat ggaggggtgcc ctggtggccg gggaatcctt cacctgcggg 240
gtgctacatc gccgggctgc tgcctcgtgg tctgcctcta ctaccagggc tgactccatt 300
gccggacagc caaaactctc ggtcagagtct ctgaaggccg tctgtccctg ttccttcogg 360
tcaagaacag gtaccacagg atgaggcgca tggaggatgc tgtgatgagt tcgtgagt 418

<210> 791

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B2

<400> 791

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gtgtcggcaa atgacctcaa gaaagtgtcg ctcttctccc ggactcgcac ctacgccgtg 180
gcttccatct ccggattcga cctccgcac ccttcccaca gcacccaagc agaccacagc 240
aacggctgca acccctgctg gaacgccgtg gtacacttcc ccatcccggc tgccgctgac 300

acccgcggcc tcgcactcca cgtgaggctc cgcgccccagc gtctatacct gggcgatcgc 360
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 gatccgaggc ccgtgagc 438

<210> 792
 <211> 460
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-011-Q1-E1-B4
 <400> 792

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 aaacgagagc ggcagacacc atggggagct cgaggacat cgttgcgctc cccctgctcc 180
 tcctcgccct cctcctcctg gctttcgcgg ccaccgccga ggcccgcgtt gtccccgagc 240
 tgtttggcga ggaccaattc cagcggacat gcaaccaggt gcacttcagg aagatgtgcc 300
 agagcttgac gaggtcccg agggtgacaa cgccgcgcga actgctgcta gcgtcgatgc 360
 gcgtcgcggc ggagaaggcc aaagaggcca agagccgggt ggacgagttc gcggcgagga 420
 accacgaggg ccggccgatg gagtccatcc tcggagcctg 460

<210> 793
 <211> 454
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-011-Q1-E1-B6
 <400> 793

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 ctggtgcctc ggctgctca tcctcgagat gtcaccggg aagccgccga cctacgacct 120
 gcccaaggcg gcgggggcgg tgccgtcggc cgaatcgttg tcgtcaccgc agaagccggg 180
 tccggcgggc ggcaacggca cggacctggt gaccgtcgtg gggtcgacgc cggagggcga 240
 gtggctggac accgtggtgg acccgacat gaggggcgag gaggaggagg acaaggagga 300
 gatggtgaag ctgataaggg tcggcatggc gtgctgcgag agtaacgtgg acagccggtg 360

ggagctcaag accgccatcg acaagatcga ggagctcaat gcgaacgagc gccccgcccc 420
cgacgacgag caggccttct actcgacggt gaac 454

<210> 794
<211> 340
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B8

<400> 794

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ccggaggcca tcacgtcaa ctgcgccaac aacctgccat gccagggcgt gcagctcgtc 120
aacgtcgaca tcaagtacaa tggatccggc aacaagacca tggccgtctg caagaatgcc 180
atcggaagt ccatcggtt ggcaaaggag ctggcgtgca tttgaaccaa ttgactaaca 240
tgcatatatt atgtactagg tttgtgcccg tgcgttgaca cggaagttaa aaattagtat 300
aaaacaaaga tacataacga taaatatcac tatgacattc 340

<210> 795
<211> 327
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B9

<400> 795

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cttaattgcy cactgctcg ttatcctct cttgcattgc attgcaggtc gtagttgagc 120
agcagcaacc actgcacagg atgtcgtggc agacgtacgt cgatgagcac ctcatgtgcy 180
agatcgaggg ccaccacctg agctctgccg ccatagtcgg ccacgacggc gccgtttggg 240
cccagagcac cgcattccca cagttcaagc cagaggagat gaccaacatc attaaggact 300
tcgacgagcc tgggtttctg gccccga 327

<210> 796
<211> 410
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-011-Q1-E1-C10

<400> 796

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ggattggtag gcctcttgaa agtcgggtg gtgaggggca tcaaccttgc ctaccgcgac 180
gcaagaggca gcgatccgta tgtcgtccta cgacttgga agaagaaact taagacgagc 240
gtgaagaaga gatctgtgaa ccccatctgg cagcaggagc taactctgac cgtcacagat 300
cccagcctag ctctgaagct ggaggtgttc gacaaggaca cgttcagcag ggacgacncg 360
atggggggacg cggagatcga cgtggcgccg ctgggtggagg cggcgaacgc 410

<210> 797

<211> 140

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-C11

<400> 797

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tgggtaatca tctgtaaaat ataataaaa aaataaaata aaatatgata taaatagggg 120
gggggctcta aaggatccat 140

<210> 798

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-C12

<400> 798

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ccggcaggac acaacacatc tatcgcatag tcagcttaaa acatagtgat gatgcgggtga 120
cgcattccatc ctccacgctt cttgtcttcg ccttaattaa tgattaattg ttatgatcat 180
gtcgggccatc cgaatgccgt atgtatgcat gcacatcgcg actaattaat ccctgttgat 240

ttattactcc gtgaaatgta ctttctccgt acacacagca cactgctctt cggctaagat 300
gaaactggta taaaccaatg ttgcattctg cataaggccc ctgacatgga tgcgcgcctc 360
cactctactc gcgttcttgg cacctttggc taccattcac cacaatatgc catgactgga 420
c 421

<210> 799
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-C6

<400> 799

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cctttcgaag aagtaacact tctccgtgag gcctgagccc ctgccgcggg tgagccaagc 120
cggcgcacgt cgccccgggg ctcacgtca ccaccgagcc ccaaccaatt aataatatat 180
atatatagct aggatcgatc gtcagtaaaa tggcaggctc cgccgtcctg aggagcccc 240
tgtccgtcct cctctacatc ctgccgcggg tgcccgccac cgccgcggcg acgccgaccg 300
acgccgccat cgacgaggcg tacgcgcac tcgtcaacct caccgctaac caggagtact 360
gggcgggagcg cgccgaggcg ggcacgcgt acaaccgcgc ggcgtaccag accgaccccg 420
tggccgtcgt gcagcgcttc aacgac 446

<210> 800
<211> 465
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-C8

<400> 800

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aacatcgag cgtcgcacgg gcaactgcag acgaacgaga tctggccac catcccggcg 120
gcgaggcg atggccagct gccggcgac ctgccgcgg acgtgctggg taagctcct 180
gacgtgcaaa gccagctgct ggcgaacatt acgcccgaga tgatgagcag tctcgccgcc 240
gtgcagcagc ctgcggctgc tggccagcct ggggcggccc ctgctctccc ggccgacatc 300

cctcagatcc ctaagatgcc cgacctctct gggctggcca atatctcgtt cccagttatg 360
 ccgtcggagc ccatgatgcc acacctgccg cccggacttc tcgttgtaca ggtacgatgt 420
 cgccatccct aagttcatca ccaacatggc cgacggcaat ggcgc 465

<210> 801
 <211> 377
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-011-Q1-E1-C9

<400> 801

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 cctgatcgac ccccgccgcc acatctctcc gtgccggttt cttggaccgc atcccgatcc 180
 gtcgcagtc gcatacaatc ctcataggga aaagatgaac gaactccagc gattgggtga 240
 tcgatcggct gcagattgct gcgacggcga cgaccggttt cattgattgc tcgcgtgttt 300
 ttcctttttc cganatattt tcttgcatgt ggtgngaagg aggaaggaac tggtagctct 360
 ttcaatgttg ttcttga 377

<210> 802
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-D1

<400> 802

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 cttggtgcta gccctcgcgc tagtggcggc caccgccccca caggtagcgg aggcaaagaa 180
 gaagagagcg gcggagagcg gcgaggcggc ggaggcgaag aagatccagg acgacttctg 240
 ctcgacgctg tgcgagggca agaaggggac ggacctggtc gtgtgcaagg agtcctgcgc 300
 gctctcccag cagtccaacc tgggtgctga cggcaggatt cagtgcaaag gcaagtgcac 360
 cgagcagaag ggcatacagg cgc 383

<210> 803
 <211> 446
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-D10

 <400> 803

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 cgtggacaat aatggcgctt ctctggcgt cgatgctgct cgtcgggctc gccgtgggct 120
 ccgaggagga ggaggacggc ggcggcaaaa agaagcccca cgtcaaccac ggcaagttaa 180
 aggcgagacc gtggacggac gggcacgcga cgtactacgg cgggcgcgac gggttaactg 240
 acaccacgga cggcggcgcg tgcggctaca agggcgagct ggggaaagac tacggcaccc 300
 tgacggcggc cgtgggcccc tgcgtgtaca ccaacggcac cgggtgcggc gcgtgctatg 360
 agtcaaagg cccaagggc accgtggtgg tgacgggcac caacgaggcc ccgccgccgg 420
 tgagcgggca gaaaggcgag cacttc 446

<210> 804
 <211> 264
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-D12

 <400> 804

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 aggcaatcaa aattgagcaa gtcgatagta caagagtgat gatagctta ccattgctag 120
 catgacgac gctaccagtg ccaccacaag gaccgcctcg ggcgtgggc ggtattggcg 180
 atcgtatcag cggtcgccgc cgtgcgagat ttcgtcgcg tgctagccgc cgccacatca 240
 ggagagctaa ccacgatggg gttg 264

<210> 805
 <211> 459
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-D2

<400> 805

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caagctcctt tccatcggtg ctgcccgcga ctgctgccac cgagatcctg tcggcacccg 120
cctccgcgcg ctcccgtgc cgcacgggac caacctgttc gcctgttcat ccactcagcg 180
acattcacgc ccgcattctg ccgtgggcag caccgcactc accaccgccg tcgcagttag 240
gtcacgagtc agctgaagag caagttggta cctggaatct caagtcccag gtcaagaaca 300
ggtaggcgag gatgaggcgc atggaggatg ctgtggcgag ttcgtgagag gtctaggcca 360
tcgtctccca gtcaactttg ggttgctgga ccgttgtctc cttataatga aattatttat 420
ttattttgta tagaactcct gttatatagt aaagatgtg 459

<210> 806

<211> 357

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-D3

<400> 806

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cgccggctat cgatcatgcc acagccgcaa cctcgaagga ggaggaggag gaggtggagt 180
cgccaagaa agaagcggct ctgtcgccg cgccggagcc tatcgatcat gccgccgcct 240
taacctcgaa ggacgangag gaggtggaat cgccaagaa agaagcggct ctgtcgccg 300
cgccggcgcc ggaggccatc gttgccgtat cagcagtgga agacgtggtg gcggaca 357

<210> 807

<211> 462

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-D5

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gttcgccatc cgctacgcgc tctccggcaa ggcctggaac aacatcaaca acaagacggc 120
cttcaccaac cgcaccgact acggcaaggg cgagcgagag gcgcagtggg ccacggcaca 180
gaggacgctg cacggcctca accaggccac cgccacctcc gacctcttcg gcgacaacca 240
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gctcagggag ctgcacacgc tcaagggaca cgtcgagtcc gtcgtcaagc tcaagggcct 360
cgacattgac accattcagc agagctacac cgtgtaaact cgactcagtt tttttatttg 420
cttttttttg cagacaaata caaaccacac acatatatat at 462

<210> 808
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-D7

<400> 808

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gcgggtcgtg cgggcccccg aaggtgccac ccggcccaa catcaccacc aactacaacg 120
gcaagtggct caccgctagg gccacctggt acggtcagcc caacggtgcc ggcgtcctg 180
acaacggcgg tgcgtgcggg atcaagaacg tgaacctgcc accctacagc ggcacgacgg 240
cgtgcggcaa cgtccccatc ttcaaggacg gcaagggctg cggctcatgc tacgaggtga 300
gatgcaagga aaaacctgag tgctcgggca atccagtcac ggtgtacatc actgacatga 360
actacgagcc tatcgtccc taccacttcg acttgagcgg caaggccttc ggctccctgg 420
caaagcccgg gctcaacgaa ca 442

<210> 809
<211> 278
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-D9

<400> 809

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tccaccatcg gtgcacagaa cgggtggccac gatgacgatc aacaacctcc tctcgtctt 120

cgccctgggt tctgcggtcc ttggtgcggc gacggccgcc gccaacgcgt tcagcagggc 180
gttcagcatc tgggtggaga tgaaccagca gtgctacgcg ctgtacgtcc aggactgcgt 240
cagggaccgc ggcaacgagc ccctgtacaa ggagctgt 278

<210> 810
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-E1

<400> 810

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tcggcgatga acatccgcgc gtagccgtgg atccgcctcg tcacgggcca cagcacacc 180
accgggttgt cgggcctggg cgtcaccgtg ttctccacc ggtacaagaa cccgcggccc 240
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tccgtgtcga tccagttgtc cctgaggtac ccggcgctcc acagggggtc cccgggcccg 360
ggcgccggcg acctgcgcgg cttccacacg cagatga 397

<210> 811
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-E10

<400> 811

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tgggtgtgga agtcgcagga cgacctgttc ctcaacggcg ccttcttcaa ccagtccggc 120
ggccagaacg agcgcaagta cgacaggctc gacctcatcc aggccaaggc cgccagtag 180
gccgagtcgc tcaccaggta cgccggcgcg ctcaactgcc gcgtcggcag gaagtgctag 240
tgcgtgtgca gctctaggct gcagctttca tcattggcga tcgatcgtaa caatgcaagg 300
ttgtgttgta tataactctt gtgtttggaa tgccgcccgt aattaatggc caactctaac 360
actgcttgcc tttgcctgcc ggccagcaac accattgtcc cttgtgggtc ctgagttctt 420

ccttgtttat ccatgcatgg aaaccg

446

<210> 812

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-E12

<400> 812

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tgctctgcct gctcctcttc tctggccgtc tcgccgcggc ggagaagact ttccgcggag 120

gcggaggcgg aggctacggc ggggttgagg ccggtggcgg aggcggcggc ggcggctact 180

ccaccccgag cgaggcagcg ccatccacgc ctgccgtgg ggagacgacg accccttcgt 240

caggcggcgg ttactccacc cctagcgagg cagcgccatc cacgcctgcc gctgaggaga 300

cgacgacgac tccttcgtca ggcggcgggg gttacggcgg tgcaaccggc aaggcttcct 360

caagcggcgg cgggctggac cccgacggcg acccagaggt tgggctgaac gggaaggcga 420

tcgaggagat cgtgaacg 438

<210> 813

<211> 409

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-E3

<400> 813

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gctcggagggt cagccgccga gaagagctca taggcaatgg caaccgcaag gaaggatcct 180

cagcagggtt ataaagtcaa cctgaaaccc agcgagtctg gcaaaggggt agtacggcgt 240

gcaaggctct tcccgacctc tccggatcgc agatcgtccc catccccggc ccagttctca 300

gacaacgcca gccgaccggc atcatcactc aacactcgca cgacctcgtc ncggtccaca 360

acaacatcta gctcggcggc ctcttcaagc cacgggaaga cgatgcgct 409

<210> 814
<211> 425
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-011-Q1-E1-E5

<400> 814

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cccaacgccg tccgcacctg ctgccctgtc gtccgccttc cttcccttct cctccccctcc 120
aactgtttcc tcaacctccc gacccaacca cggccgtgcc cgccaaggcg ccaaccgcac 180
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ccactgtttc gggctgcata ccttgccaag gctggagatt gggaggtcac gctggtggtg 360
ccttggtgtt ccaaggggga tcaggagctc gtttatccaa acaagatgag gttcagtttg 420
ccggc 425

<210> 815
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-E7

<400> 815

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tagtgggcct gtcctctgc cacctcgcca ccaccgctc cgcccaccag aaagacatcc 180
acgtcctcgg cagcgtcgac ggctccagcg acggcagcag ccccgagtcc gaaggccgcg 240
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cgccggggcc gtcgtccggt tgaactgaga agcgtgcgtc cagccaagca atgtggtcag 360
aaccgagaac taattaaggg ctcgatcgtg tgcaggcta ctactgttct tgccataatt 420
atatatagat acgcaaag 438

<210> 816

<211> 51
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-E9

<400> 816

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<210> 817
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-F1

<400> 817

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caccgcgcc cttcccaacg gtcgggcagc ggctgccggg gcggcgcggt cgcgctggg 120
ccgcgacggg ccgccctccg agctggacgt gatgaaggag aagttctcca agtcctgtt 180
aggcgaggac atgtccggca ccggcaaggg cgtgccgtcc gcgctcgcg tgtccaacgc 240
catcaccaac cttgcggcgt ccgtcttcgg cgagcagcgc aagctggagc ccatggcgcc 300
cgacaccaag gagcgctgga agagggaagt cggatggctg ctctccgtca ccgacctcat 360
cgtcgagttc gtgcccacgc gccagacegc ggagaacgga acta 404

<210> 818
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-F10

<400> 818

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cgaattagac gacttcttcg tccctctctt cattagcacg ctaacttgta atctgcagga 120
tctaagcaaa gacttgattt agttatggac ggattggtag gcctcttgaa agttcgcggtg 180
gtccggggta tcaaccttgc ctaccgcgac gcaagaggca gcgatccgta tgtcgtccta 240
cggcttggca agaagaaact gaagacaagc gtgaagaaga gatccgtgaa ccccatatgg 300

caagaggagc taactctgac cgtcacagat cccagccaac cactgaagct ggaggtgttc 360
gacaaggaca ccttcagcag agacgacccc atggga 396

<210> 819
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-F11

<400> 819

ccacgcgtcc aggaacatgc cccccggcat gccgcaggtg ctcacgtca cgggcctcac 60
ctggctctcc tggttccctt tcctcctctt cgacaccgac tggatgggcc gcgagatgta 120
ccacggcagg cccgacggca gccccaaaga ggtggccagg ttccaggagg gcgtccggca 180
gggcgccttc ggctgtctcc tcaactccgt cgtcctcgga gccagctcct tcctcatcga 240
gcccattgtc cgcaagctca cgcgaagggt cgtgtgggtc atgagcagtt tcctcgtctg 300
cgtcgccatg gccttggtca cgtcctcag ctctgggtcg ctccgagaca tcgggggcaa 360
agtgaagac gccgcgcgcg tggataaggc cctcaagacc accgcgct 408

<210> 820
<211> 449
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-011-Q1-E1-F2

<400> 820

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ctgacctccc aaagctgtgg tcgcgattca aacaaaaagg aaatgatcag gcgacaacc 180
ggcatggatc ggttcttgca gctgctggcc gccggcgtgg ccgtgctact gctagtggca 240
acgcggggcca tggctgacga cgacattgta aaagtcngcg tcaactgggg atcgagctc 300
tcgcaaccgc ttctccccgg ctccgtggtg aagatgctca aggcgaaacg catcgccaag 360
gtcaagatgt tcgacgccga ctctggccc gtcggagcgc tcgtcgactc cggcattgag 420
gtcatgctcg gcatcccaa cgacatgct 449

<210> 821
 <211> 324
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-F4

<400> 821

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tgctgatcaa cactggcctg ctgccgcca cggcccggaa tctatctatc tatctatctc 180
cttggaacaa tatatcagac gatgccccag cgctgcccgc tgatttgatg caagtatgag 240
gttttcattt gtaaatacga gtcgatccat actaagcgat acaggaaaag aaaaaacca 300
agggcggccg ctctagagga atca 324
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<210> 822
 <211> 342
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-F5

<400> 822

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agcggcatct actacggcga gttcaagtgc tttggccccg gcgctgacgc caagaagaag 120
aagaggggtg ggtgggctgt ggacctcacc gaggcgcagg ccaagccatt cgtcggcaca 180
cactacgtcc tcggcgacac gtggatccag ccaccgcca agtagcgacg catgccacac 240
gatatatcta tttgagtacg aagcaaaagc gagagacacg aatctctaata ctctttactg 300
atgagatggt ttgcttatat atatatatag acgagctaata ga 342
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<210> 823
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-F8

<400> 823

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 gacaccgtgc agaggatcct gatcacctct gaacctgatc ccgtggagac gcagaacgat 180
 gatgccgcca agctcgatca tcacgagaag gctgcgaagc tgagagacaa taagtcggcc 240
 atcaggagga tatggcagtt cggcaaata aactcgtccg gtgcttccgc ctccgcgacg 300
 gcgccggagg acgcggaggt tcttcagttt ccgaagtcgc caaggtcgga caacgagtac 360
 catgtcgtcc aggacctcac cgaggaggtg ccgttcatgg agacgagagg cgaggaagaa 420
 gaagaagaag acggcgagcg catgaacc 448

<210> 824
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-011-Q1-E1-F9

<400> 824

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 ccagatccgg caccgcccgc tgctcgaacc cgcacccac gcccgcaggc cgggaccggt 120
 gggcgcgcg cgggcagtag gagggagagg aaggcgcgca tggcgcgcc gccggcgagg 180
 gcccgggccg actacgacta ccttatcaag cttcttctca ttggggatag cggtgttggc 240
 aagagttgcc tctgtttgcg gttctctgat gttccttca ctacaagctt tattaccaca 300
 attggtattg actttaagat acggacaata gaaatggatg gtaagcgtat anagctacag 360
 atttgggata cagcggggcc aagaacgctt ccgtactatt accactgcgt tctaccgtgg 420
 acctatgggt at 432

<210> 825
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-G1

<400> 825

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cttcacagga actccgacgt gcaacggcgg ccttcaccac gaactcctct tctgggctga 120
tgatgggtgcg gcagagagtc aggggtgatgg ttatTTTTTT ggagatgaac tgcagcaggt 180
cttgcggtga tttggaggca gcctcacggc agtatggaat ggactcccc ggaatgatcg 240
ctgtggcctg ctatttatac actaccgaa tttggctctt tgccgagtgc caaattcttt 300
gtcgagtgtt ttatttcggg cactcgacaa agagctcttt gccgagtgc acgcaaaaaa 360
ccctcggtaa aagaaaacac tcggcgaaaa agctctttgc cgagtgtttt atttttgaca 420
ctcggcaa 428

<210> 826

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B2

<400> 826

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cgccgtgccc gccaccgccg cggcgacgcc gaccgacgcc gccatcgacg aggcgtacgc 120
gcatctcgtc aacctcaccg ctaaccagga gtactgggcg gagcgcgcgagg aggcggcgca 180
cgcgtaaac cgcgggcggt accagaccga ccccgtaggc gtcgtgcagc gcttcaacga 240
cggcggtcac agggcgacgg cgacgcggtc gcggtcgctg gcgcacaagg cgcgggggccc 300
ctgcacgggg accaacccca tcgaccagtg ctgggggtgc cgccgcgact gggccccgca 360
ccgcaagcgc ctggccaggt gcgcat 387

<210> 827

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B4

<400> 827

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caggtcgtag ttgagcagca gcaaccactg cacaggatgt cgtggcagac gtacgtcgat 120

gagcacctca tgtgcgagat cgagggccac cacctgagct ctgccgccat agtcggccac 180
gacggcgccg tttgggcccc gagcaccgca ttcccacagt tcaagccaga ggagatgacc 240
aacatcatta aggacttcga cgagcctggg tttctggccc cgatcggcct cttccttggc 300
cccaccaagt acatgggcat ccaaggcgag cccggcgctg tcatccgcgg gaagaaggga 360
tctggaggca taactgtgaa gaagaccgga caggcgctgg tgatcggcat ctacgacgag 420
cccatgaccc ctggacagtg c 441

<210> 828
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B5

<400> 828
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atcgaaaccg agcgtctcgt cagatatccc cagacttcca gcaaggtaca tagtaaaacc 180
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agggttgctg gcgtccagcc tgaaggcgct gcctgtcaa attaccttat tcagtacgca 300
ctagccctgg ttctgaagga gagcttcaag atctactgct caattaacga tggcatcatc 360
aatctcgtcg atatgttctt cgaaatgccg aagtacgacg caatcaacgc tctggcgatt 420
tacaaa 426

<210> 829
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B6

<400> 829
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cgagggcctc gtcacctccc gctcgtcccc ctccatctac ctcgctcttcg agtacctcga 120
gcatgacctc gccggactca gctcctcccc cgacatcacc ttcaccgagt cgcagatcaa 180

gtgctacatg cggcagctgc tcgaggggct ggcgcactgc cacgcgcgcg gggatgatgca 240
 ccgggacatc aagtgcgcca acctgctggt gagcgacggc ggcgagctca aggtggcgga 300
 cttcgggctg gtgaacctct tgcgcgcggc gccggcggcg ccgctgacca gccgggtggt 360
 cactctctgg taccgcccgc cggagctgct cctgggcgcc acggcgtacg agccctccg 419

<210> 830

<211> 341

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B7

<400> 830

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 cgtcgtggct cgagggcctc gtcacctgcg gtcctcttc ctcgatctag gtcgtcttcg 120
 acgtatggcg gagcatgagg tcgcccgac tcgagctcgt gcggggcata tcagcattca 180
 ccgtggtcga agatcaagtg ctactatgcc gcagtatgct caaggaggct gtcgcagtac 240
 cggggcacgc gaggggtgcag gcacacggga catttcggtg cgcggaagaa tgactgagtg 300
 tcccactggc tggtagctca cagtggcaga gggtcaggat g 341

<210> 831

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B8

<400> 831

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 tcggcgtcgg cgacgactgc atctccatcg gcccgggag caagatgatc cgcattcatg 120
 gcgtcaagtg cggcccaggc cacggcatca gcgtcggcag cctggggcgc tacaaggacg 180
 agaaggacgt ggaagacgtg caggtgacgg ggtgcacgat cgccggcacc acgaacggcc 240
 tgcgcataa gtcgtacgag gactccaagt cgtcgtcaa ggccagcaag ttcctgtacg 300
 agggcatcac catggacaat gtctcctacc ccatcatcat cgaccagaag tactgccccca 360
 acaacatctg cgtcaagtcc ggcgcctcca aggtggccgt caacgacgtc gtcttcaaga 420

acatccacgg

430

<210> 832

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-C12

<400> 832

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catcctgcgc cttgaccttg ctgggcgtga cctgactgac agcctgatga agatcctcac 120
tgagagaggt tactccttca ccacctctgc tgaacgcgaa attgtaagag acatcaagga 180
aaagcttgca tatgtggctc ttgaatacga ccaggagctc gagaatgcca agagcagctc 240
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gttcagatgc cctgaggtcc tcttcagcc ttccttcatt ggtatggaag ctctggcat 360
ccatgagacc acctacaact ccatcatgaa gtgcgatgtc gacatc 406

<210> 833

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-C2

<400> 833

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actgcatctc catcgcccc gggacctcca aggtgaacat caccggcgtg acctgcggcc 120
ctggccacgg catcagcatc ggcagcctag ggcggtacaa ggacgagaag gacgtcacgg 180
acatcaacgt caaggattgc actcttaaga agacgatgtt cggcgtccgc atcaaggcgt 240
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aggactcagc caaccccatc ttcacgcaca tgaagtactg cccaacaag ttgtgtactg 360
ccaacggcgc ctccaaggtc accgtcaatg atgtcacctt caagaacatc accggcacct 420
cctccacccc ggagggccgt tagcctgct 449

<210> 834

<211> 448
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-C4

 <400> 834

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 tcaatccgtc cggcggcgcc cccaagcagg tcgacaccaa cgagtgggtc aagcccaagc 120
 caggaacctt cgttacaagg ctaccccgct tctccggcac actgtcctgc tgcacgggca 180
 agccgtgctg aaggccggcc ggtggggcgtc agaggctgct tcttctagct catggcctgg 240
 ccatgccagg tcgcgatggc tgcgtttcat ttcattggaag aaagcaagga tggatcacag 300
 gttgtcgttc tgctaattaa tcgacgtttg ctttcaagta ctgtgttggtg gcattgttac 360
 acatcacagt acagtttggc cttttttttt ccacagagga agtacggatt gatttaatcc 420
 cacacgcgtg gtactacgta tacagttt 448

<210> 835
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-C5

 <400> 835

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 caccgcctca tcttcttgga ctgcgcgccac tccttgtagc agggcctgta cgcccgagc 120
 gtggcggacg cccgcattcg cccgcgcgtc cgcttgctga agcagaacct gtcgttcttg 180
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 ggctcatgg 429

<210> 836
 <211> 438
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-C6

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gggctgagcg	tgatcgtgag	cgccgtgctc	accagccgcg	ccatcttcca	gcgcatgaag	180
aactacacca	tctacgccgt	gtccatcacc	atccgcatcg	tgctgggctt	cctgctcgtc	240
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gacggcacca	tcatgaccat	ctccaaggac	cgcgatgaagc	cgtcgccgac	gcccgactcg	360
tggaagctca	aggagatctt	cgccacgggc	atcgtgctag	ggacctacat	ggcgctcgcc	420
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<211> 434

<212> DNA

<213> Zea mays

<400> 837

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caacaagccc	cttgttttcc	aggttggcca	tcttgaggaa	cggtagcagg	aatgggttca	180
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gactcgcacg	aagtgggtggg	ctgtgccaac	tatatggctg	cctgttgtct	gctgcctgct	300
cgtgaaatct	attctgatgg	gtcataccgt	tcatgacgta	gctatgatgg	ctctgtttgg	360
gatattttatt	tggactctga	tcgaatacac	tttgcaccgc	ttctgttcc	acatcgagac	420
caagacctac	tggt					434

<211> 132

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-C8

<400> 838

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cgtcgaccag cgcgcgattg gcgacgctgg cctgactgag gaagacggct cgcaaatcgt 120
tcagaggtaa tg 132

<210> 839

<211> 176

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-C9

<400> 839

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tagcgctggc gctgcagtac ctctccgtag actctactac agacgtgagc catggaccat 120
gtcgtcgcgt cgctgcagca gatcagtaat ccccatatag caccaaggat gcccac 176

<210> 840

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D1

<400> 840

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aagcccctaa cgcttggcgg gcgctggta cagacaacc acggcaagtt cacggccggg 180
ccgtggaac ccgcccacgc aaccttctac ggcgggcgctg acgggtccgg caccacggcg 240
ggcgcgctgc ggtacaagga cacgcgcacg caggggtacg gcgtgcagac ggtggccgtg 300
agcactgtgc tggtcggtag cggcgcggcc tgcggagggt gctacgaggt gcggtgcgtg 360
gacagcccta gcgggtgcaa gcccgcgcg 388

<210> 841

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D11

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cgggtgttctg gagacagagc gagagagaga gagagagaga gaggtagacg gagatggagt 180

gcctgctggg gctgctcaag gtgcgggtgg tgcgaggagt gcacctggca atctgcgacc 240

cgctcaccca cagcagcgac ccctacgtcg tcttccgcca cggaaagcag aaagtgaaat 300

caagtataaa ataccgcacg attaacccag aatggaacga ggagctcacc ctgtccatca 360

cgaacatgat gaacccggtc aagattggac tctttcgaca cg 402

<210> 842

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D3

<400> 842

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ctggcggggcg cgtggtacac gacaaccacg gcaagttcac ggccggggccg tggaaacccg 180

cccacgcaac cttctacggc gggcgtgacg ggtccggcac cacggcgggc gcgtgcgggg 240

acaaggacac gcgcacgcag gggtagggcg tgcagacggt ggccgtgagc actgtgctgt 300

tcggtgacgg cgcggcctgc ggagggtgct acgaggtgcg gtgcgtggac agccctagcg 360

ggtgcaagcc cgacgcggca gcgctgggtg tgacggtgac cgacctgtgc 410

<210> 843

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D5

<400> 843

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 cgaaaatgac ccgtgccagc agcagtagca gcagccggcg tgtgacgctg gtactgctcg 120
 gtctccgcct gctgcttctg gttgggtgtg cgcaggcggt agtggagttg gtgcctgctg 180
 atgataatat cgccgccgcc gctgctggca cggcgggtga cgatggcgag ccgcctcagc 240
 agtgcgcgac cccggtgagc gtggaggagg cgtgccgcgg cgcgtccgag acgcacgccg 300
 gcgtggccta cgaccactgc atggcgtcgc tgggcgccga cccgcgcagc aaggaggccg 360
 gcaacaagaa catgcacggg ctggcggtgc tggccaccag ga 402

<210> 844
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D6

<400> 844

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 atctcgcggc acgacaagtc cgagagcaag gctgacgaat aagctgctgc tactaccgtt 180
 gccgccgacg agcatggctc tgtcaagacc atgtccctcg acgcatacgg gccactggag 240
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 gctggcgctg acacatatga ccagaaaccc gttggtgaaa aacaggctga aacggccacg 360
 gcctccgctg ccgatgaaca acccgacaaa tacggtggaa gctcctattc ctgac 415

<210> 845
 <211> 355
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D7

<400> 845

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 cagtcgaagt cacatccaca gcagagtcgg tcagttagaa aaggaaacca atcgattaat 120
 cgagcagagc aggccgcatc acgagagggga cttggcgacg ggggcagttg agaggaggcc 180

ggagagcaag ccgacgacga ggcgcgtgtt gtacgtggtc ggctcgttct gctgcacgtt 240
 ctccctgtcg tcgacgaacg agtcgttctt gaacggcccg ccgaccagcg cgcccggtggc 300
 gacattcggg ttgggctcgg ggcacttgag ccactcctgg ccgtcgcagc cggtg 355

<210> 846
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D8

<400> 846

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 ctctacggc gcggcgggcg cttccggggg ctccgccgat gccccgccg gcgcctccga 120
 gggccctgcg agcgccagcg gcccgctctg tgacgacgcg ccggcggtccg gtgctggtgc 180
 cagcgcgtcg gctgctgatg ctccggcggc ggcggcctca tccggtccct cgagcgcacc 240
 agcgccatcg tcgtcgtctg agtcctccgc cgcacgatgc tcattctctg atggcacctc 300
 gagcgcccca gcaccatcgt ccggcgacga ttctgattcc aacgaccatg ggtaacttg 360
 agcctgaccg atgacgcagg tttgggttac cggtgccact caaa 404

<210> 847
 <211> 347
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-E1

<400> 847

cacgcgtccg gccgccgtca tcctatgcct atgcgtcgtc ctctcctgtg ccgcggctga 60
 cgacccgaac ctccccgact acgtcatcca gggccgcgtg tactgcgaca cctgccgcgc 120
 cgggttcgtg accaacgtca ccgagtacat cgcgggcgcc aaggtagggc tggagtga 180
 gcacttcggc accggcaagc tcgagcgcgc catcgacggg gtcaccgacg cgaccggcac 240
 ctacacgatc gagctcaagg acagccacga cgaggacatc tgccagggtg tgctggtggc 300
 cagcccgcgc aaggactgcg acgaggtcca ggcgctcagg gaccgcg 347

<210> 848

<211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-E12

 <400> 848

 gcccgacgca cgcgtccacg agcaccccg cggctagggt tacggccacc gccttccacg 60
 cctccccac ttcccgtagg cggaggctgg tcggcgtgca cgcgaccgcg gcggcggaga 120
 tggaccggga cttctcgccc gggggcgggg ggcccagctt tgaattcgcc ttcaacgagg 180
 tcaacttctc cgaccgggaa ttgctatcg aggtcgtcgc cggggatgac tacgctccgg 240
 ggtccagcgg cgccggtgcc ggaggaggtg gcctcgccga ctgggcgcgc caccgcaagc 300
 gccgccgtga ggagctcctc aaggagaaag aatctacaac tcacatgtca gaccaaacia 360
 attgcaatga agttgaagca gaagagtgtg atgcgtatga agaaaatcaa gaggaacctg 420
 tagcaatggt 430

<210> 849
 <211> 109
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-E4

 <400> 849

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 tagcacaatg tgcaaaactt tttcataatg taagagagtt ctggcgtca 109

<210> 850
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-E5

 <400> 850

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 ggcagaagtc ctatcaggat ctcatgaaca ccgtctaagc tctgccttag atggacacta 120
 cgacgagaag aggaaatcca atgtggaata cacagaggac gagaagaaag ccgtgatcgc 180

ggctctgaaa aagaaggctt tgagcgctc acagaagttt aggcattcca tgaaaagggg 240
gaggaagagc agcaaggatga tgtccatctc gattctggat gagccgtgaa ccttgaggag 300
tgaaggcttt gatggctttc gccagcctct tggctctgaa gagctgctaa catcgagca 360
tgatgactac cacatgatgc taagatttct c 391

<210> 851

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-E6

<400> 851

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aacatcatgg ggcaagcctc acggctcgtc ctctcgccg tcgtggcgct gctgtccgcc 120
ggcctcctcc cgcaggcgct gggtaagggt aggggaggca ggggacacgg tggcgccgctc 180
aaccgcgagg tcgccggcat ctgctctcgc acccgttcc cggagggtgtg cacgtccacc 240
gccggggcggc acgcgtccaa gtaccgggtc atcgacaacc tggccgtgct gaacatgcag 300
gtggacgcgt tcgccaagcg caccgcgcag gcgcgcaagc acgtcgcgag gtcggccccgc 360
accatccccgc cgcagcagac gcatgcgtc acgttctgcg acaccatgta catgaacacg 420
c 421

<210> 852

<211> 413

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-005-Q1-E1-E7

<400> 852

ccacgcgtcc ggtactgccc caacaacatc tgcgtcaagt ccggcgctc caagggtggcc 60
gtcaacgacg tcgtcttcaa gaacatccac ggcacctcca acacgccgga ggccatcacg 120
ctcaactgcy ccaacaacct gccctgccag ggcgtgcagc tcatcaacgt cgacatcaag 180
tacaacaggt ccgacaacaa gaccatgtcc gtctgcaaga acgccatcgg caagtccatt 240
ggcatggcga aggagctcgc ctgcgtctga acctacttgc atccatcact cactcttcgt 300

cacctctctc tttctcactc tcgccagtct ttttttaggc ctctggcaat ctgcgaactt 360
tcttattcat tctactagtg tggatctata attccattca anatatatac atg 413

<210> 853
<211> 415
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-005-Q1-E1-E8

<400> 853

ccacgcgtcc agtgcattgc ttcggtggc caccatggcg cagcgagcgg tggccacgat 60
gacgactaat aagccccctc tctcctcgc cctggcgctc gcgctccttg gtgcggcgcc 120
ggccgcccgc aacgcgcccgc gcggggcggt cagcaactgg gtggcgatga accagcagag 180
ctacgcgctg tacgcgcaga agtccgtcgg ggacgggggc aaggagcccc tggacaagaa 240
gctgtcggag gcggagaaga agaatgtcac gtacgtgggt gaccccagcg gcaagggcga 300
ctacaccaac atcaccgcgg cgctggagga tatcccgggt agcaacacca agcgcgtgat 360
cctggatctc aagcncggcg ctcagttccg cgagaagctg ttctgaaca tcagc 415

<210> 854
<211> 87
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-005-Q1-E1-E9

<400> 854

gtgagtcgta ttaancgtcn tnttcttcgc ttgttggtggc gctggtgctt gtcctgttgt 60
cgatgctggc cgtcctgcta tcggtgg 87

<210> 855
<211> 236
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F11

<400> 855

ccacgcgtcc gatctccatc tctcgcgtct ccttgggtgc cgtgttcacg ccgtcgctag 60
cgctgccgc ggccaagctt ctgccctccc cggcgccggg ctcggttctt cgtcggccag 120
gcagctgcta cgcgtgaaca cggtcacacc agtaccacgt gacgtgaacg gtgaactcgt 180
gaagaacaga gccgccactg aggaacccta gcgacggcgg cgtgctaccg gtgaca 236

<210> 856
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F2

<400> 856

ggtcgacgcc cgcgtccgga agcaggccga cccgttgctg ggcaagaggt accccgtgaa 60
ggggctgttc caggcgctcg ccgtcgcgtc catgtgcttg caggaggacg ctgccagccg 120
gccggggatc agcgacgtcg tctcggcgct ctcgttcctc gccgatccgc aatactaccc 180
tccccaaggc acgggagccg agcagaaggc cacagatcga gagagtaaac ccaacgacaa 240
ttctacagac aaggatagca gtcctcataa ggccggaatg atcagggcag acgacgaaac 300
gaagcataga tgatgaccgt aggggggggaa cgctaacgac gggaattaaa agggaggaac 360
actgcag 367

<210> 857
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F3

<400> 857

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aggctcgtggc cacgcacgcc gtcgcgccgg gctccgcgtg cgcggtgaac ggcacgggtc 120
acttcggtat agcggtgctg ctgcccgaga cgccgccgcc agcctcggcc gtgagggcca 180
ggtggtgggc gtggacggtg ggtgtcggcg ccggtggggg gctgggagcc agcgccttga 240
cgctctctgt gggcggcgcg gtgagctgga ccaggatgcc gcgaaggag gagatggatc 300
ggcgggcgat ggccggggag gagctgggga ggatgaccgt gcgccggaac aagatgccat 360

cggcga

366

<210> 858
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F5

<400> 858

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tctcctgctg tcgctgctgg tcgccgtgct agcgggtggcc gccgatgtcg ccaacgccgg 120
ccacgccaaag cccctgacgc ctggcgggcg tgtggtacac gacaaccacg gcaagttcac 180
ggccggggccg tggaaacccg cccacgcgac cttctacggc gggcgggacg ggtccggcac 240
cacggcgggc gcgtgcgggt acaaggacac gcgcacgcag gggtagcgcg tgcagacggt 300
ggccgtgagc acggtgctgt tcggtgacgg cacggcctgc ggcgggtgct acgacgtgcc 360
ggtccgtgga cagccctagc ggggtgcaagc ccgacgcggg gggacgggtg gtgacggtga 420
ccga 424

<210> 859
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F6

<400> 859

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tcgtccaca tggtagtctc tcacagcacc ttcacgtcaa agagtttgag catctggact 120
gggctgcgag gatgagggtc atcatgggcg tcgcatactg ctttcaatac atgcaccatg 180
agctcagtc acctatggcg atccacgcg tcgggtctga cacaaccttc atttcagatg 240
attatgctgc caagattgca gatgttggtg tatggaacga gcttgctgcc aaagcgaagg 300
ctggaaagga ggacggcagc agccgtgctg aagtcctcc ggatctccca agcaacgcct 360
actgcttcgg cgcgctcatg atcgagacca tatccgggag ggttcctgac ccgtatgatc 420
acaaacccat atgcagct 438

<210> 860
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F7

<400> 860

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 tcaactccaca tggtagtctc tcacagcacc ttcacgtcaa agagtttgag catctggact 120
 gggctgcgac gatgaggggtc atcatgggctg tcgcatactg ctttcaatac atgcaccatg 180
 agctcagtcc acctatggcg atccacgacg tgcggctctga cagaaccttc atttcagatg 240
 attatgctgc caagattgca catgttggtg tatggaacga gcttgctgca aaagcaaagt 300
 ttggaaacga cgacggcagc acccgttct gaagctctc cggtctctcc attcagcgcc 360
 tactgcttcg gcgcgctcat ga 382

<210> 861
 <211> 439
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F8

<400> 861

ccacgcgtcc gaagcaataa cccctctctc cttcgtcac catcacatcc agccagccaa 60
 caaaaatgtc gcgcgtcaca gctgcggtgc tcttctacat cctcgccgtt gctgccctca 120
 gcgcggccga ggccccggca gagtcaccga aggaaggcag tgctgccaag gcacctgagt 180
 ctgccaagag aactgctgcc cccgctgaag caccgaagc cgcattccacc cccgtcgccg 240
 ccgctgcccc atcgccgtcg tctaggaagt ctggtccagc taccgcgcca gccaccgct 300
 ctacaccccc ttcttccacg gacgaggagt tgagcccttc cccgccagca tccaccgccg 360
 cggcgctccc tgcggctgag ggaacggctg ctgatgactc cgccggtgct gctgcccttg 420
 gaagtggagc tgccatcgc 439

<210> 862
 <211> 257

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-G1

 <400> 862

 cacgctcca cccacgcgtc cccccacgcg tccgcgcca ccaggatccg cgtggccttg 60
 ctgagcttgg cgctgggtggg gctgctcatc tgccacctcg ccaccaccgc ctccgccggc 120
 aagaacagaa tccgcatact cgacagcgtc gacgactcgg ccggggacaa caacagctcc 180
 gacgcctcgg ccggggacaa cagcaccgac tccgagtcgg aatgccgcgt cgtcgattcc 240
 gacatgaagc tggctga 257

<210> 863
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-G3

 <400> 863

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 tcctcatcgg cctccggtct tctggtctcc ccagatctcc caccggggaa ccctaccga 120
 gcatcagcca tggcgatcgc ggcgcgcgtc ctgcgcgcc tcccgctcca cctctacccc 180
 tcgctcgctc gctctttctg cgcagtttcc ccggccgcgc cctcggccgc cccggcgtcc 240
 gcctcggccg ccccggcgtc cgccaaaggt cgcgatcgca tcgtgcgcgt cctccccatc 300
 gatctcgagg gggcgccccg cgaggtcgtc ggctctctcg ggagacact cctccgcgcg 360
 ctcggaacg cgagctcac caagccgggc tcccaccggc tcgaggatat cgacg 415

<210> 864
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-G5

 <400> 864

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 cagtctcca tcgaaatcgt ccctgtcacc accgccacca ccaaagaaaa gtggtagtac 120

gtctagctct aaagatggga agacgaagaa gtcgtcttca tcgtcttcat cgtcagataa 180
 tacagccgct gtgatcaccg gcgtgggtgct tgggggtgggt ggcttcgctc tgctcttgct 240
 catcgtggcg tgcgtgtgct gcgccaagaa gaagaagaaa cgcccgcccc caatgaacat 300
 gcccttctac accgacgaga aaggcaatgt gtattacccc aacgctgggtc tgccgcctat 360
 gtggcagcaa tatggcagca acggcagcat ccctccgccc ggatggcacc atc 413

<210> 865
 <211> 218
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-G6

<400> 865
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 gtcttccagg gttcctgcat caatctatct ccagacacca aaggcaacaa tacatcgatc 120
 tttcaatact tccacctcca tcttcggcat ggccatcaga tctccttcat ccctcctcat 180
 ccacatcata ctcaagccaa ccgttagtaa atgatgtg 218

<210> 866
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-G7

<400> 866
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 tgctcgccgc ggcggccgtg ctgaccacgg tgcccggcgt cgcgctcgcc aagtcgaagc 120
 tcgccaagaa gagcgacgac gtcgtgaacg ggcccctcct gaccgagaag atccaggcga 180
 agaagacgct gatcgtgggg ccggacgagg agttcaagac cgtgcagtcc gccatcgacg 240
 cggtgcccgc cggcaacgcc gagggggtca tcgtccacct ccgctctggc ctgcacaagg 300
 gcaaagttgt gataccggag aacaagccct tcattcttct gaagggcaac ggcaaaggcc 360
 ggacctccat ctcccacgag tccgcctctt ccgacaacgc ggagtccgcc gcgttcaccg 420
 tgaac 425

<210> 867
 <211> 336
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-G8

<400> 867

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 agccggggcc ggatgccgcc accgcggcga actaggcgctc gttgtggctc cgcaagagct 180
 tcaggcagcg cgctgcccgc gctttccgcc gcaacatgtc gggcgctccgc gtcaggacgg 240
 tcacggacct cgcccaggaa cgggactcag tgcgcgcgt cagcaacaag gtctccgatg 300
 aagccgaggg cgctaccgcg gtgcgcctg caggtg 336

<210> 868
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-H1

<400> 868

taccggtcta gaattcacgg gccgacccac gcgtccaccc acgcgtccgc gccagcatcc 60
 accgccgcgg cgtcccctgc ggctgagggg cgggtgctg atgactccgc cgggtgctgct 120
 gcccttgga gtggagctgc catcgccggc gttgccgctg ctggttgctac catgatcttc 180
 ttctactaaa ctcaccgacg atggctcgtgt cgcggtgaga cattaggggtg gacacgtaat 240
 tggctgtgct gtaatcgctc tcgtctgggtg gggagggagg gaccaagtgt ttctttgctt 300
 tgctcacttc gtttgctctt gtaacattat ggggtcaacc gttatgtaac taatggattt 360
 gattaatccg gtctctaaaa 380

<210> 869
 <211> 457
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-005-Q1-E1-H2

<400> 869

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ggctgctcca tgaaccagcg gctgctgac ctgcgtgtca ccgcgttcgt cgaggagggc 120
cggagctaca gggtgaccgt ggacgcgccg agaaagccgg agctggcgcc gcgaggggtac 180
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tgagatcgat cagctcacat ccaccgtgtg ggtcgtgtcg ggatcgtgta cacaagtgga 300
gagccagcct aactctctct ctctctctct gtgtgtgtct ctttgcgttc tttgggtttg 360
ttttcctgct anggatggat ggatgtaa ataggatgatc agattggcca gttcaccgct 420
ggatcactct nataggttga ttggatacct gccaca 457

<210> 870

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-H3

<400> 870

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cgaagagacc ccagccagtc gatcggtcaa gaaaaatacc agcttagcag caacagcagc 120
agcaagccca cccgttcgac gacatggccc gcctcggcgc cggcgccgtg ttggcgctcc 180
tattggcggt cgcgggcggtg gccgcgttcc tcgcggtgcc ggcctcggcg aagtccgggg 240
aagctaacc caaggggggt gtggggcgga aaggccggaa ccgcgccggc ccgcaaaaat 300
tctcgggcgc ggtggggcgaa tgcgacgttg acgatgcgga ggagctcggg ctgagcggcg 360
gcggcctcgg c 371

<210> 871

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-H4

<400> 871

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cagcgatcca ttctcgtagg ggggagagag agagagagag agagggagag aaatcaaaga 120
ggagagtgat catggagcat gtgatcggag ggaagtataa gcttgggagg aagattggga 180
gcggatcctt cggagagcta tatctcgggtg ttaatatata gaatggagag gaagtgggaa 240
taaaattggg gcctgtgaaa acaaaacatc cacagctgca ctatgaatct aaagtttata 300
tgctgctgca cgggtggaac ggtatccac acctcaagtg gtatgggggtt gacggggagt 360
acaatgttat ggtga 375

<210> 872

<211> 291

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-H5

<400> 872

cccgggtcga cccacacgtc cagcggttcg aaacagaact acctccctcc gctgccgccg 60
ctgacgaggt gcaaccaaga ctcggttc ttccgactgt ggaagaaggc ggcgctgccg 120
acgtgccagg cgccgccgga tgccaccccg cgcggcgcc gcggttcgca ccacgtcccg 180
cggccgtcca tcagccgggg cacgcagcgg ctctacgtcc gcctcaacac gctccactac 240
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<210> 873

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-H7

<400> 873

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aaaaaaaaa aagggaagaa aaaaaaaaaa gaaaaaaaga ggaaaaaaaa agaaaaaaaa 120
gaagaaggaa agaacgaaga aaaaaagagg ggagaggaaa gagcgaaaga aagaagggtg 180
gggggggagg ggtggggggg aggagctttt ccggggggtt ggtgtccccc gtgtgtgaga 240
cgtcgggggg ggggggttgtt ggaggggggg tttcgggggg ggcggcgggg gttttggggg 300

<210> 876
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-A12

 <400> 876

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 tacagaatac tactgctccg tgtatacgga gaaactacat ttcacggagt agtaaataaa 120
 cagggattaa ttagcgccgt gtgcatgcat gcatacggcg ttgggctggc cgacatgac 180
 ataacaatta attaattaat taaggcgaag acacgaagcg tggaggatcg atgcgtcccc 240
 gccgccgcag tatgttttaa gctgacttgc ggtagatgtg ttgtggcctg ccggcggcgg 300
 cgtccttctg ggtgtctatg acagtctcga aggcgccgac gagcgccttg accctgctgc 360
 actggcgctt ctgcatcagc ttggtgcgtg ccgcctcga 399

<210> 877
 <211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-A2

 <400> 877

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 gcccggcgcc aagggcggcc aggcgggtggc ggtgcggctg ttcgggacca agacgcagat 120
 ctacaactgc accatcgacg gcggacagga cacgctgtac gaccacaagg gcctgcacta 180
 cttcaagggc tgcctcatcc ggggcagcgt cgacttcac ttcggcttcg gccgcagctt 240
 ctacgaggac tgccgcatcg agtcggtggt caaggagggtg gcggtgctga cggcgcagca 300
 gcgttccaag tccatcgagg gcgcatcga caccggcttc tcgttcaaga actgcagcat 360

<210> 878
 <211> 281
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-A3

<400> 878

gtcccgggac gactcacgcg tcagcacagc aatcaacggc ccgcggtagc aaccaagatc 60
ctctccaatc gcttcccttc gccaaaggtcc acggcggtga acctggaaac gggaaaaaaaa 120
tattccgcac aaagtgcgcg cagtgcctaaa ccgtggatcg aggtaggctc cacacgcagg 180
gacccaacct gcactgcctc ttcggtcgtc agtcaggcac caccctcggc tatgcctact 240
ccacggccaa caagaacatg gccgtcgtct gggaagaggg c 281

<210> 879

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-H6

<400> 879

cctggtcgtg tgcaaggagt cctgcgcgct ctcccagcag tccaacctgg tgctgtacgg 60
caggatccag tgcaagggca agtgcaccga gcagaagggc atcacggcgc cggccatgaa 120
ggtctgccag gaggagtgcg acaaggcgta cgtggtgaag gcggccgagg tcaccaaggc 180
ctgcagcgtc acctgcgcca aggagaagaa cccgcgcctc agcgagaact gcaagaggtc 240
ctgcacccct cctccttctt gaagcgaagc cccttgaaat gaatgaacca tgcattgatg 300
catgcatgta tgcattgcgc ggggtgacgt ggcgttcagc tcaggcgctg agcgagtcta 360
tacgtacgtc gtcaccggct ggccacgcat gcgataacca tctgatattg acggaactat 420
ata 423

<210> 880

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-H8

<400> 880

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ggtttcggaa atcctctggc aactgttaca gaaggagtgc tccagcacat ccaaagctcg 120
ctgtttcctt ccatttaaac gaagctcccg taaagctcca cttaggccgg attgtcatca 180

atggctatat ttatgacagg gatcgtgcc a gctacactgg gactgtagaa ggcataaggc 240
cacagacagt cgcgatcgg tcaaggctcc agtcgtccgc acagggctac gccgatcgat 300
gtcacattac actgtcaacc gatcgtatag acgactggtc attctacggg agttaccaag 360
ttactaatta cccgcatgag tcttcaactg tcgatgatgg actcgccga 409

<210> 881

<211> 316

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-H4

<400> 881

gtccgagcac atacacgatc gagctcaagg acagccacga ggaggacatc tgcgaggtgg 60
tcttggtgga gagcccgccg aaggactgcg accaggtgca ggcggacagg gaccgcgccg 120
gcgctctgct caccaggaac gtcggcatca gcgacaacct gcgccccgcc aaccgcctcg 180
gctacctcaa ggacctgccg ctgcccattc gcgcctcgct gctcaaacag ttggactcgg 240
acgacgacga cgatcagtaa tagcacatcg acgacgacga tcgatatgta atagcacgtc 300
gtcgacgacc gaccgc 316

<210> 882

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-G10

<400> 882

cgtccgagtt cacgctaggt agattaaaag ttatctcagg tgcttcacta ggaaaaaatg 60
aagtacctta gttaagtttt gtaacaagga tatttgatca gtgcatgtca aaggagggtg 120
tcaaaccaac gtgtcatatg actgtctagc ttatgaatgt tgctcctggt ttatcaccgc 180
tgaaggccaa gcacacaatc atcctttatt gatggctcac actggaaact tgagccagcg 240
tgatcacaca atcgatatac caatgagtga tggtatgacc gcataacat ctcaccagga 300
tgatcatagt ggctcggatg agctgcatcg cagcagaggt ccttcgaatg aagtttcacc 360
aagcccagat acatcttccg gtacaaacga tgtatccaac tctc 404

<210> 883
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-G4

<400> 883

acgcgtccga atttctccta gaaggctcgag aggagaagaa ggcgagacgt gcagtccgtc 60
 gggctccgat cgagaacagg gaagcaagag gctgctagag atcgagctca tcaaccaatc 120
 aagtcgtacg tcgtcagcat cacgcgaccg gatggcgcg cccgcgtcca gctatgtatc 180
 caggaggggg ctctccgcag cgatgacggt ggcggaggac tccgtgaaga aggtggagga 240
 caaggcggtg aagctgggaa ctgtggccaa ggacatcgcc agcgccatgg ccaccacgac 300
 ggaggagaag acggcggttct gggaacctga ccccgagacc ggatactacc gtccggtcac 360
 cggcacgaag gaggtggacg ccgccgacct gcgcgccgag atgctcaagc gggggattct 420
 gcaggacgac tgatgcatgc aacatgcac 449

<210> 884
 <211> 350
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-E3

<400> 884

gcgtccgaag agaaccagca gcctccaata agagccagcc agagaaacta ataaaactct 60
 caccgccgcc atccgagaga acaagccaac cgaccccgct cccaaggcaa tccgtcgccg 120
 acgtaccagc gccaccgcag gagcgagatg gagatgaaga ggatcctctt cgccgtcctc 180
 gtcgtcatcg ccgcctcggc caccgcagtg ctggcctcca ccgaggccgc cgccgcgggc 240
 gccccaaactg cctccgagtc gtccgccgag gctcccgctg gcgctggcgc tggcgctgcc 300
 gctggcgccg ccgcgcgggg gccctccgcc agcagcggcg ggcccgcctt 350

<210> 885
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-E4

<400> 885

ggtcgacata ccgggtccag cacgcgtccg catcgcatgc acctcgtttc cctcggcggt 60
ggatcagtgg cggcttggtc gagatgggag atgcgggtga tgacatcatc tgtgcaacgg 120
atgcggcggt cgccgtcgag gatgcggcca gtgggaagcc cgcaatgctc tctagcttag 180
gggggcaggg tgaggaagag catgaggaga aggacaatga ggacaagtca ggcgagagcg 240
aggtgatcaa cccgccagaa gacgctggcg gggaggccac ctcaccctg gaagggttga 300
agcctcgcct ttccaagggg aatcaaagcc atggacctaa tgctgtcaaa tcaaagagcc 360
caacgagtgg agacgaaggt cagacgagga aaaaggctcc caattcttct cttcctaaag 420
caccca 426

<210> 886

<211> 267

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-E6

<400> 886

actttctact cctcatcttt ccattttctt actaagcaaa acaacttcgt ttggacagca 60
tctctatggc ataccctttc ccgtaggtca cgggggggtc cacatttttc ctcaataaat 120
tatcgctctt ctcccagact cttcatctac gcaatggatt ccaactccg attaaaccta 180
ctcatccctt cttacattac ccaaacaac cagatcaaag gctgctccct ctgctaataa 240
ctcattctac tcttccccat cccttac 267

<210> 887

<211> 272

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F1

<400> 887

gggtcgagca cgcgtccggc aagatcgtgg atgggggttc cacgacctct cctgatgtcg 60
ctggtggccg ccaggccagc agtgggtgcc gatattctaa aatccggcca tgcaaaaccc 120

ctgacatctg gaggggtgcct ggtacaggac aaggacagaa agttcacagc cggggcatgg 180
aaaccagcca atccaacatt ctacggagga cgggacggat cagggaccac ggcgaggacg 240
tgagggtaaa aggacacgcg cgcacaaggg ta 272

<210> 888
<211> 325
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-066-Q2-E1-F7
<400> 888

aaaggacatc acccggtgcc gctgccggtc gccctgcaat cgggtggcaga cgatgtcgcc 60
aacgccggac agacgaagcg cctaactcct ggtgggcgcg tagcatagga caacgagagg 120
gggggttacgg ccggggccgtg gaaacctgtc gaatcatcct tctgaggaag gcgtaccgca 180
tccggcagca gcgcggccgc atgcgggtat aacgacaccc gcactcacgg gtaacgcttt 240
caatcagtga cccctcacca ctgtgctgtt cggtgactgg cgcagcctgc ggatgttcct 300
accatgtgcg atgcttgcac agccc 325

<210> 889
<211> 336
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-066-Q2-E1-E2
<400> 889

gcgtccgaaa cgacgtggac ctggcgcaac acgtgacggt gccaggttg acggtggaga 60
tggccggtgg cgcgaggcta gagccggaag ccaagagcgt ggtgatgccg gatgtagtac 120
ccgggtgcgc gtgcctggcc tttaggaagc tgccgcgggg agggcccggg atcttgggca 180
aagtgtcat gcaggagtac atctgggaga tcgaccaccg tcaggggaag atgaggttca 240
ggaaggcgaa gtggaggacc catcatctcc aaaccagctc acgctgagac gtctatcata 300
attagaatgg catttctctc actactgtcg tgcagc 336

<210> 890
<211> 407
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-D7

<400> 890

attcgccggt ccacccacgc aaccgattgg tgttcttggg gagcggcgca tggcgcggtc 60

ctcccaaagt cccccaggc aagaacatca cggccaccta tggcaaggac tggctggacg 120

ctaaagcgac atggtatggc aagccgacgg gtgccggtcc cgacgataac ggtggcggtc 180

gcgggtacaa ggacgtgaac aagccccct tcaatagcat gggcgcatgc ggcaacatcc 240

ccatcttcaa ggatggtctg ggttgtgggt cctgcttcga gatcaagtgc gataagcctg 300

tgggtgtgctc cggcaagccc gtggtggtgc acatcacgga catgaactat gagcctatcg 360

cggcgtagca cttegattta gcaggcacgg cgttcggccc catggcc 407

<210> 891

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-D9

<400> 891

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gtggcgctgg ccgcggaggc gccggctccg tctcccacca gcggctcctc cgcggtcgca 120

cccgccatcg tcggggccgc cgtggcctcc ttcttcgcgt actacattca ctgagccgcc 180

ggacgaggag ccggagccgg agggaagaga ccaaggtggg gggagagact tggctgcgct 240

gcgctgctct gctgctcccg cgcattcccg atgcgtgggc gtgctctgat tgggcacggc 300

ggtggcagtg gcacaccttc gtcttccttt tgtttgtttt ttttccttcc tctttctact 360

tgattttc 368

<210> 892

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-C9

<400> 892

gggtcgagca cgcgtccatc accatccgcc tcactaccga gggaggcacc aagtcctgtct 60
 acgacgatgt catccctgcc aactggaagg ccaacaccgc ctacaccgcc aaataattaa 120
 ctttagtgct gacaatactt taagccggcc tatgctagct atactagaat tggttggatc 180
 ccaagcaatg cattacacat gcatgcattg gaccgtgata tctatttgct accactaccc 240
 tattacgaca gtgatgctgg cgccaacaat gatgggtgtca tctccttctt ccatcttctt 300
 catctccata tatagctaga gtgagacttc gctgttgttt aaaagagaag agttaagaaa 360
 tggattgaca agttaaaaaa aaaaaaaaaa aaaaaaaaag aaaaaaaaaa aaaaaagaaa 420
 aggaaaagaa aaaaaaggaa aggagaacag 450

<210> 893
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-066-Q2-E1-B12
 <400> 893

gggccgagca cgcgtccgag cgcgatctcc cagcagtcca acctggtgct gtacggcagg 60
 atccagtgca agggcaagtg caccgagcag aaggcatca cggcgccggc catgaaggtc 120
 tgccaggagg agtgcgacaa ggcgtacgtg gtgaaggcgg ccgaggtcac caaggcctgc 180
 agcgtcacct gcgccaagga gaagaacccg cgcctcagcg agaactgcaa gaggtcctgc 240
 acccctcctc cttcttgaag cgaagcccct tgaaatgaat gaaccatgca tgcattgatg 300
 catgtatgca tgcgccgggg tgacgtggcg ttcagctcag gcgctgagcg agtctatacg 360
 tacgtcgtca ccggtggcc acgcatgcga taacca 396

<210> 894
 <211> 73
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-066-Q2-E1-B3
 <400> 894

acgcgtccgc acacgcgtcc gccacgcgt ccgaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaggaggaag cac 73

<210> 895
 <211> 303
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-066-Q2-E1-B7

 <400> 895

 gcgtccgcac acaagtctgc ccacgcgtcc gaaaaaaaaa aaaatacata aaatcaatac 60
 ctcccatcac tctcctacta taaaaactca cgctccgcctc catgaaagtt ttctcctttt 120
 ctatgtgttg ggggtgggttc ccctctccac atctgttttt acgacttcat gaccaggtc 180
 caacgtgatc tctgctaacc actgtgccta tgcaccctta ccccgactac agacttcaca 240
 tcccactaac cacttgatgc ccctatctca tctgcctatc catgcatcca ttgcattgct 300
 tct 303

<210> 896
 <211> 263
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-066-Q2-E1-B8

 <400> 896

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 tggcctcccc tcttccact tctctttcat tgcaaggctc tttgtgccgg ggtggatttc 120
 ttactccaca taaatatgga ggacttcac atcacgttca atgacatcac tgctaatacag 180
 gtaccttag acccttactt cgatcacaca cttcacatcc catgacttat ttattgctcc 240
 tatatcattt gtctatccat tca 263

<210> 897
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-066-Q2-E1-B9

 <400> 897

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aggccaacag cagtggaggt ttgagcat ccttctttc agccatgctt ctatgtccca 120
ccttcacttc gcttcaaata tactggatat gcatcaacgc caccatcagc tggggctaaa 180
ggagctgttg atcagaagaa cattaggaga tactacatgg gtactgtacc caatgcgagg 240
ccaacagtta attactcgta cttgagaaac aatgctcctg caagagcagt tgggtgcaca 300
aggaaattgg agttggatta tcagctccca gagactaata accataataa ggtgacaaa 359

<210> 898
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-C1

<400> 898

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gaaaataatg aagagccgca gcatggcatc atcggccgcg ctcttggtgc tagccctcgc 120
gctagtggcg gccaccgccc cacaggtagc ggaggcaaag aagaagagag cggcggagag 180
cggcgaggcg gcggaggcga agaagatcca ggacgacttc tgctcgacgc tgtgcgaggg 240
caagaagggg acggacctgg tcgtgtgcaa ggagtcctgc gcgctctccc agcagtccaa 300
cctggtgctg tacggcagga tccagtgcaa gggcaagtgc accgagcaga agggcatcac 360
ggcgccggcc atgaaggtct gccaggagga gtgcgacaag gcgtacgtgg tga 413

<210> 899
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-C11

<400> 899

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caccgaagg ccacctcatg gcacgttctc cccgtgact ggaagtccgg cgtcacgtac 120
caggcatcca agaacttcta agtagccact ttccctctc ttcttcatcc tgcatatgcc 180
cacaagcaac catgcaaata ataacatgca tcatgcatgc atattcattc tttcgctcat 240
gcactccaat atggtgccgg agttaaaaa atgtaaatca atgtgcaaac tcaaatgaca 300

tcttaaccag ttgtgatcaa tctcaaccgc taatgcattg cacacaccga atgaagctac 360
catccactgc tgg 373

<210> 900
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-C4

<400> 900

gggtccggcc cgcgtccgga tttatcaagg caagaaagtt tgatatcgag aaggcaaagc 60
aaatgtggtc tgatatgctg aagtggagaa aggagttcgg tgcagatacc attctcgagg 120
aattcgaatt cgaagaagct gataaggtgg cagaatgcta ccctcaaggt taccatgggg 180
ttgataagga aggcaggcct gtctactttg aacggcttgg acagatcgat gtgaatacgc 240
taatgcaggc cactacaatg gatcgctttg tcaagaacca tgtcaaggag ttcgagaaga 300
actttgctgt taagttccca gcttgctcaa tcgccgcgaa ccaccatatt gaccagagca 360
caacaattct tgacgtgcaa ggagtgggga tgaagcagtt cagtaaagct gcaagggagc 420
tcattgggat gc 432

<210> 901
<211> 327
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-A11

<400> 901

ttcctactac tttttcaact acgattcctc aagtatttcc ttttttcagt cacattgttc 60
aatagacata cattttatta aatatgcagg gcatcgtaga agagaatggg tctcccttcc 120
aaaaagcaaa acaaaagaaa ctcgtatagt cgatcgacga ccatgcatca catttccttt 180
tctcgatct tctcttattt ccgcagaaaa acaacgaagg aaaccaacc aaggaaacgc 240
atgctattgc ttaagcatcg ccggaggagc tggtcgatcg ctcgctcact cacgggcctg 300
attgttccgg tcacctgtcg tcgtcct 327

<210> 902
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-A12

<400> 902

atgccaaagg cctcgtgcct tctcttcctc cctggcatgg aggaagtagc tgtttcgcct 60
 atgatcggtt cgcgcgtagt gctggacaac aatggcgccg acgcggtctc ctgcactgcc 120
 atccctagcg taacaataag cctagaggag aaagaaaata tcaatgggga tgttcccacg 180
 atcacctcgg cgcgaagcaa cgaggaggag gcgttggtca gtgtcggaga atccaccaag 240
 gacgatggcc atcgcttgac gatggaatgc accactcccg tctcctccag tagcccttcc 300
 actcgcaaga agcgcggggc gttcagcctc ttcacggcga tgttcctgtc cttcggccgg 360
 agcgacgaca gcattaagaa gacagaccac gataccacga gccc 404

<210> 903
 <211> 406
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-066-Q2-E1-A2

<400> 903

gcgtccgcac acgacgtccg cgatgacgcc taagtcgtca cctccaccgg ttgttgtag 60
 ctcaccacca ccaactgtga agtcttctcc accaccggca ccagtcagct caccaccagc 120
 gacacctaag ttgtcacctc cacctgtctc tgtgaacttg ccacctccag aagtaaagtc 180
 ttctccacca gcgacaccag ttagctcgcc accgccagcg cctaagtcac cacctccacc 240
 tgctcccatg agctcgccac cacctccaga ggtgaagtct cctccaccac cagctccagt 300
 tagctcgctt ccacctccag tcaagtcgcc acctccaccc ggccctgtga gctcanctcc 360
 cccctctgtg aagtctccac catcaacggc accggtcagc tcacca 406

<210> 904
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-A3

<400> 904

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cgggtcccgcc cacgtcgtcg accacgtcgt ccaccgggaa cttgaccggg tacctgtgga 120
atacgccgtg ccacatccgg agccccatct cgacgaccac ctcgacgacc cccacgtgca 180
cctacaccgg cacctacagg gacagcgaca gggagtgggt caaggggcgg atccccgatcc 240
ggacgctgat ccagtcgggtc gtcccgctct acatgacctg ctacacgacc agcctgacgc 300
ggaccatgtc cgcgatcaac tgcgtcaggt accgcttccg gtcctcagac ccctggacag 360
tctcccgcaa cgtctagccc cacgacgaca gccgcctctt cagcgcgggc atcaccgtcg 420
gcacgaccat ccg 433

<210> 905

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-A6

<400> 905

cccacgcgac cgaggacgcg tgggctagtg cacaacaaaa gcaagcctca gtagaccctt 60
ttgacttcgg tactcagaca cagcagtcca caacactccc ctttgatttg agcaccagg 120
caaagcagcc aggatcagtt tctcatgtta cagcagctac aatcccacct gcgcaaccac 180
aaccatcact acaatctctt gcggctagtt caggacctaa aatttctggc tcatgtgtcc 240
ctgtcgacat tgagtggcct cctcgaagaa gctcgtcatc cagcttcaat gcacgcttgt 300
ctattagcaa ggataatggg tctggaaggc tgtctagcga tggcgttgat gatattgatc 360
cttttgctga ttgggccccca atacctaaca atgttaatag catttcagca accgagcatt 420
ggccaagcat 430

<210> 906

<211> 281

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-B1

<400> 906

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ggagacagct ttttggtggg gtccttgccg catctcatga atgatcgctg acaatcctga 120
cgaagtcggt tgaccttcac gtcacacagt ttgagcacga gtcaatagat ggtggacaat 180
gactcaggaa ttctttacac taggatacta aatcgcgggc tgatgcatcg tggcctgcct 240
ctaacaccaa tgcttactcc attgccggac aacaaaaact c 281

<210> 907

<211> 354

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-066-Q1-E1-H12

<400> 907

tccgcggacg cgtaggcgga gatggagatt cccgaggagt atatcgagtc cctgccgaag 60
aacggaggtc attcttggag actccatgta caagatcata accgacgacg tcttcgaccc 120
caacgagctc ctgcagtcgg tggacctgtc gacggagcac aagatcgtgg acctcaagga 180
ccggatcgag gcctccgtcg tcactctggca ccggaagatc agcaacaagc tctcgtgggg 240
gcccgccggc gtcagcctgg agaagcggga ggagttcgag gagcgggccc agancgccct 300
gtcctcctc aagcacaggt tcccggcatc cctcagtcgg cgctcgacat cagc 354

<210> 908

<211> 198

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-A10

<400> 908

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gctatctcgg ttcacaattc ccgtccagaa gacgacgatt agtcagtcgg cagctagggt 120
cgcacgcgca aggccacgat tgatggcgtc ttcaagtccg agatcacgac actggagatt 180
ccaggcaagc gtagcatc 198

<210> 909
 <211> 125
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-A12

<400> 909

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 cattgtcgcg gtagtgctgg agcacaacgg ttcctatgcg gtcgcctgca atgccatacc 120
 tagcg 125

<210> 910
 <211> 277
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-B10

<400> 910

atgttcatgc gtcctgtgcg cgcccatctt cttcagaggc tcagtgttc cggggagatc 60
 atccacgatac acgcttagct cgcacgccat gtgctcgtag gtgacgatac cgcgatcac 120
 tctgtgtcag gtcacacac aggcattctga cccatccaga ttattcttgc gtcacatc 180
 atgcttcgcg acggccttca tcgcaagatg gggaaggcgg acagacatcg cctccgtgtt 240
 ggctccgacg gtgcaattgg gtccacacac gcgggtg 277

<210> 911
 <211> 110
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-C11

<400> 911

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 ctcgcggctg acaggaagtt cggcgctcacg taccacgcaa ccaggacctt 110

<210> 912
 <211> 310
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-C12

<400> 912

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ttttccgaca ttcacagggg ggacaggaaa tcagtggcca tggcctcgat tccggcgacg 120
accttcgccg tcattttatc gctcctcttc ggtgccgcgg ctggcaccgc cgtctataac 180
gacctccccg actatgtcat tcagcgccgc gtctattgag acacctgccg cgccgggttc 240
gtgaccaatg tcaccgagta catcgccggg ggccaaggtt agggctggag ttcaagcaac 300
ttcggcaccg 310

<210> 913

<211> 226

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-D9

<400> 913

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tagctgcctc ttcgggtaca ggctgtgggt ccacgcctca gtcacctgt ctcaaagctc 120
ccgtccccca gctggcgctc tagagaacct ggctgattcg ctacttggt caaagatctt 180
cgcagtctca atcgacagtg cgccgcgcct tttccttgcg cattaa 226

<210> 914

<211> 89

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-E10

<400> 914

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cgccgctccc ggcgttggtt ttgtcgtca 89

<210> 915

<211> 104

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-E9

<400> 915

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ggcaactgat ttttccacac caagtgctaa cgctcggctt gtgt 104

<210> 916

<211> 345

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-F10

<400> 916

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ccccaaagaag agagccatcg cggctgctga tgacgattgc aagcctgccg atgacgagtc 120

aacgtcgtgg aagcgcctcg tggacggtat gcgcccgtc cgctccgcg ggcagctgga 180

gtactaccgg ccgccaccgc cgccaccgcc gctggggccac gccgatgtgt accatgacgt 240

gacctcccg ccgccgtcgc aggcacggtt cggcttcgag atcaaggaag ttggcatgac 300

cagccgctac gcgttcgctg aggatctgca ccagatggac agcga 345

<210> 917

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-F9

<400> 917

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gcactggtac cacttcaccg ccatcggtgt cgccggcatg gggttcttca ccgacgccta 120

cgacctcttc tgcattctcc tcgtgactaa gtcctcgggt cgcattccact acaccgtgga 180

ggggtcgca acgcccggca gcctcacgcc gcacatgtcc gcgtccgtca acggcgtggt 240

cttcgtgggc acgctgtcag ggcagctctt cctcggccgg cagggcgaaa agctcgggcg 300

caagaagggt cagggcatgc cgccatgcc cagggctctc agtttccgtc ccgtcggggc 360

c 361

<210> 918
<211> 340
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-G1

<400> 918

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gcgtggggcg caacgacggc ggcgtcgtcg ccggcctcgt ggctgtggg atcgtgatgg 120
ggaccatgtc caacgccaac aacctgatgc aggacctcaa gacggggtag ctgacgctga 180
cctcgccgca caccgtgttc atcagccagg ccatcggcac ggcgtccgg tgcgtccgtc 240
aaccggtcat gttctgggct tctacagggt ggtgcagaac ggcgacaccg acgtcttcga 300
cgcgccctac gcccagatgt accgcagcat cgccatgctg 340

<210> 919
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-G11

<400> 919

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ggtgctcctc ctcggtgcgt gccccgagta cggctgcctc gtgtacgagt acatggagca 120
cggcagcctc gaggaccggc tgttccgtcg gggcggcacg ccgccgatcc cgtgggcgca 180
gcggttccgg atcgcggcgg agatcgcgac ggcgtgctg ttctgcacc agacaaagcc 240
ggagccgctg gtgcaccggg acctgaagcc ggccaacatc ctgctggacc gcaactacgt 300
gagcaagatc agcgacgtcg ggctggcgcg tctggtgccg ccgtcggtgg cggacagcgt 360
gac 363

<210> 920
<211> 284
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-G9

<400> 920

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gctcaacgac tatatcaatg gcaccgag gacaaccttt ctgtacccaa gtgctgtcga 120
ccaatttagg aagcaatttg ctcatcttga agaacatagt gggaacggac ctgtgattcc 180
aatggaaaga aaccatactt ctcttcctag gtctactagt gttcactcat cctcaattcc 240
tgtcaaggga caaccccgta tcggcccatg ttcggaaagg cctt 284

<210> 921

<211> 280

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-H1

<400> 921

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gctcgaggaa gttcttggct ggaggttttg tctttacgga gacttcttgg tcattctctt 120
tgtcaactgc acttgaggat caaccacac ttagtgactg ccttgcttgg tcccatgctg 180
tcagacatta gagttgcca gtgattacac tattacagtg cagctgtagc acatttattt 240
gagcatggtg gatctgtttc tctggcaaca ttccagtaat 280

<210> 922

<211> 166

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-F7

<400> 922

accacgcgtc gggccgtacg agaanccttc tgctctctcc aactttctcc ctttctgcc 60
aaggcaaaac accttcgccg gcgaaaacat ggcgatggcg tgacgtgtcc tggaggctta 120
actgatgtct cgcaaattac ctcaagaaag tgtctctctt ctccccg 166

<210> 923

<211> 204

<212> DNA

<213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-F8
 <400> 923
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 cctgcgtgga ccggacgcgt cgcctctgcc atatccgggg caagatgcac aagaagggtgt 120
 ggatcncggg cggggacatc gtcctcgtcg ggctccgca ctaccaggac gacagtgccg 180
 acgtcatcct caagtacatg aacg 204

<210> 924
 <211> 73
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-065-Q1-E1-G10
 <400> 924
 aaaaaaaaa taaaataaaa aaaaaaaaaa aaaaaaaaaa aaaaataaaa aaataaatta 60
 tggataaaag aaa 73

<210> 925
 <211> 295
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-G2
 <400> 925
 cgtcggccca gcacaagcat caacatatgc tattccaata gataatgtta tacatattat 60
 ccataaaaca gagacgaact tgtgtaggct cactgcagca gagaggaatg aaacgatact 120
 gaaccacgca tgagttcaac ataaggtacg caaagacaaa acacagtaat acttcttgat 180
 attggtttat gcagttcaca ttcgatttca tcttcgactg ggaaggaatg ggctgcatct 240
 ctggtgctgc agcagcgtca nccacgggct acctgaacac gcgggcgagc cgctc 295

<210> 926
 <211> 96
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB148-065-Q1-E1-G3
 <400> 926
 gcgtcggacc agatccggcc agtcgaacga gaatgtcgcg cgccacagct gaggtcctct 60
 tctacatcct cgccgtcgac tgccttcagc gcggtc 96

<210> 927
 <211> 502
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-G5

<400> 927
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 ggaaagatcc atctacagat ttcaggggcg gtggttttat atctttggag aatttactgt 120
 atttctctag gaactatcca aaatccttcc aggagctcct ccgtaagcag aatggtgata 180
 gagcattgtg ggaatatccc tttgctgtag ctggtgtaaa tattacattc atgctgattc 240
 agatgcttga ccttcaagca gctaagccaa cgtcgttggc tggagcagtt ttcctaaatc 300
 tacgcttata aaatgatcga ncgttcgaca ttctttactg cataaccttc agactgatgg 360
 atcagaaatg gcgttaaagt caccgcagtt acatggattt caatacgggt attaaatcaa 420
 caccggcgcca gctcgagagg gagctgttgc tagaagatat caagagaatc gaggacatgc 480
 catcgtagag gtttctcgcc tg 502

<210> 928
 <211> 235
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-G6

<400> 928
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 cgccggggcc acgggcgcgg tccgcctcgc cgcagagcaa cgccccgcgg gcgtcgggccg 120

tgcncaggtt cggcgtgtgg gacgagcaga ccgcttcgtc ggccgcgcaa gggttcacgg 180
 tgcagttcga gaacgtgaat gcgaaccggg aggtggccac gtccgggggtg ccggc 235

<210> 929
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-G7

<400> 929

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 cttcacgtac ctgcgcatgg ggcccgaact gttccagccc gacaactggc gccgcttcgc 180
 cgcgttcgtc aagcgcataa cggagccggg cgcgcgggag gcggtccggg agcaggtgga 240
 gcgggaggcc gacggcgtcg cgcaggcgac ccatcccctc gtgcacgagg ccgccgtcgc 300
 gctcacgagc gtgccggacc gggcggcggt cgccatcgac tgtgttcgat cgctagacgg 360
 ggtggcacgc tgcgaggact acctgtatgg cgagtccta tacttactca tacataagct 420
 gcgccgccgt gtcgtcgggt cgtgcaccgc 450

<210> 930
 <211> 233
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-G8

<400> 930

ccacgcgtcg gaactccacc ctgcgaggcg ctgncaggt aagtcggcgg cggcgaggac 60
 aacgcgcgtc aagaggaagc gcaggagcgc ggcacgtggc gcgcgggcac ggccgcatcg 120
 gcaagcacag gaagcagccg ggaggtcgcg gtaacgccgg tggcatgcga caccaccgta 180
 tcctcttcga caagtaccac cggggcgacg tccgcaaggt tggcatgcgt tac 233

<210> 931
 <211> 247
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-H1

<400> 931

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ctcagtttct tcgaatagta gcattctatg cagcagagct tccagcacct aagtatcatt 120
gtcgcgaggg ctcgcctctg gctagattac caccaccca gaatgcagct gaggtctttc 180
tgattaattt cccaacaagg agtgatttat ggatgtgggtg acttgatatt ttcatgccac 240
atgattt 247

<210> 932

<211> 339

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-H10

<400> 932

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ctccatcggc cccgggacct ccaaggtgaa catcacggac gtgacctgcg gccctggcca 120
cggcatcagc atcggaagcc taaggcggta caaggacgag aaggacgtca cggacatcaa 180
cgtcaaggat tgcactctta agaagacgat gttcggcgtc cgcataaagg cgtacaagga 240
cgccgcctcc gtgctcaccg tctccaagat cactacgag aatatcagga tggaggactc 300
agccaacccc atcttcatcg acatgaatta ctgccccaa 339

<210> 933

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-H12

<400> 933

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tcgtggcggt gttgtctgcc ggctcttcc cgcaggcggt aggggaacggc aagggaagg 120
tgcattggcg cggtgccgtc aaccgctgg ttgccggcat ctgctctcgc gccccattcc 180
cagaggtttg cacggccaca gccgggcgcc atgcatccaa gtaccgggtc atcgaccatt 240

tggccgtgct gaacatgcag gtggccgcgt tcgccaagcg cacagcgagc gcgcggaagc 300
acgtcgcggt ggcggcccgcc actattccac cgccgcaggc acaggccctc agaacctgcg 360
acacgatgta catgaacacg caggacgcca tcggcgcggc gcagcgagcc atcgcg 416

<210> 934

<211> 248

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-H2

<400> 934

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cgtacctgtg cgggctcaac tacacggacg acagcgtgag cagcatcatc taccgggagc 120
cgccggtgtc gtgcgccaag ctgtcaaggc tcgaacagga cgacctcaac taccgtcca 180
tcaccgtcat cctcaaccag ccgcgcttca gcgcgaaggc caaccgctcc gtcacgaacg 240
tcggcgcg 248

<210> 935

<211> 165

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-H3

<400> 935

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ttcttggtga gcggcgcatg gtgcggtcct cgcaaagtcg cgccacgcag agagcatcac 120
ggccacctat ggcaacgact ggctggacgc taaagcgaca tggta 165

<210> 936

<211> 79

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-H4

<400> 936

cggccacgc gtccggtccg aacaagacaa gtctgtgttg ccttanaaaa tcaagtggca 60
cggaanaaga ttctgaac 79

<210> 937
<211> 325
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-065-Q1-E1-H5

<400> 937

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cagaacgtgc gcaacgtgat cctccacaac ctgcacgtcc acgacgccgc ggcgacgggc 120
ggcggcgcga tccgggactc gcagcacgac tggggcgtgc gcgngagag cgacngcgac 180
ggcgtctccg tgatggngtc agcnatgtct ggatcgacga cctgtcgatg agcagctgcg 240
cggacgggct ggtggacgcg gtggacggct cgaccgccat cagcgtctcc aacggccact 300
tcacgaggca cgagcacgtt atgct 325

<210> 938
<211> 488
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-065-Q1-E1-F5

<400> 938

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ccgccggact cctctcgcag gcacggggta anggtagggg aggcagggga cacggtggcg 120
ccgtcaatcc gcaagtcgcc ggcacatctgt ctgcagccc gttcccgag gtgtgcacgt 180
ccatcgccgg gcggcacgcg tccaagtacc caggcatcga taacctgacc gtgctgaaca 240
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cacgcaccag cccgcggcag catacgcagg cgctcacgtt ctgcgacacc atgtacatga 360
gcacgcagga caccagctac gcggcgcagc gggccatcac gttcacggac accggcatcg 420
ccaagatcat gctgcagctc gccgtcgacg acttcgactc gtgcgaccgc cccttcaccc 480

aggccggc

488

<210> 939

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-H6

<400> 939

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gagcatcagt caaaggaagc atcagtgtct cttataacttg atagcttgga agatctgtca 120

gagtcagaat tgtcgactat tagaaaacag ctgattgagg aattttcagc agatgacatt 180

tgtcggggat ctcatTTTtac tgaaacacct tcgaaatctg gagcacaaaa tggaaaactg 240

caccacaaat ctatggaggt tattccattc ggatttggtt gtggagatgg ggctctcggt 300

gaagcatctg acagcttagt agaacctcac ttgcgacatc tgcgatgtaa cagcgTTTct 360

gatgttgacc g 371

<210> 940

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-D2

<400> 940

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atgatccgcg actcgaagcg gcactacggg ctgcgcacgc ggagcgacgg cgacggcgctc 180

tccgtgctgt cgtccagcaa cgtgtggatc gaccacctgt ccatgtccag ctgctccgac 240

gggctgatcg acgtggggaa cgggtcgacg ggcatcaccg tgtccaacag ccacttcacc 300

gaccacgacc acgttatgct gttcggggcc agcaaggaca gcccgcagga cgcggtgatg 360

caggtcacgg tggcgTTcag gcacttcggc cgcgggctgg tgcancggat gccgcgctgc 420

cgc 423

<210> 941
 <211> 285
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-D4

<400> 941

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 agcatggcca tggcgtaccg tgtcctggag gtcacgctgg tgtcggcaaa tgacctcaag 120
 aaagtgtcgc tcttctcgcg gactcgcacg tacgccgtgg cttccatctc cggattcgac 180
 ctccgcatcg cttcgcacag cgaccaagca gaccacagca acggctgcaa cccctgctgg 240
 aacgccgtgg tacacttccc catcccggtt ggcgctgaca cccgc 285

<210> 942
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-D5

<400> 942

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 aaggatcatg gtaattggat cgagattcta cgcgtggaca accttgtcag cagcggcaag 120
 ggaaagcgcg acgggcaggg gccagccgtg tggagcaaga actcctgcgt caagaagtac 180
 gactgcaaga tccttcccaa ctgcgtggtg atggacttcg tgaacaacgg ggaggtgtcc 240
 gggatcacgc tgctcaactc caggttcttc cacatgaaca tgtacaagtg caaggacatg 300
 ctgatcaagg acgtcaatgt gagggcgcg cggggaagcc caacagcgac ggcattccaca 360
 tgggcgactc gtccgggggtc acgatcggca agcacgtcat cggcgtcggc gatgactgca 420
 tctcc 425

<210> 943
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-D9

<400> 943

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ggcgatgcct gaggctagac aaatactgag ctagccttca gaaaaaaaaa gaaaagaaag 120
agattgagaa gcagggagaa aaaatggcac tggcccattg aggaagcttg agaaccagtt 180
aacaagaatt gccaacatat tcttggacaa tcttgtaac agagttttaa ggtttcccag 240
cagagaagag cgcgtgcaac caccacattc atataattaa taagcaaggt ttagagaaga 300
ggcaacatgg gcacaaagat gaagaagggg atcctgaagc cgttccgcta tatctcaacc 360
atcatggatg gtaaggaggc tgaaatgcaa aattgggttc cgacggatgt aaaacac 417

<210> 944

<211> 305

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-E1

<400> 944

cgcgtcggcc ggatgcgccg ccagagcaag gccgtcgcgc gcgtccgcct cgtcctcgac 60
gagaagaagg tctcgcaatt caanggccaa cgatgacgtc tgagataatc catgacggtg 120
gcgcggcgaa ctctatcat aaaacctatg cttcctgcca acggagtgc tccatggcct 180
gtcctgggac acctgtgaga tgacgtgata gagcgagtag tacaactggc ccagcgagcc 240
atgcagagac gctcgacttg ccacaggccg gggcatatta cgcgatgccc agcagcagat 300
gtact 305

<210> 945

<211> 241

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-E3

<400> 945

gcgtcggcac acgtgtgcct tttggagacg cgatgtcgtc cggcaacaag atcagcgtgg 60
ccttgctgag cgtggcccta gtgggctgc tcctctgcca gctgctcagg agcgcctccg 120

cccaacagaa agacatccac gtcctcggca gcgtcgacgg ctccagcgac ngcagcaccc 180
cgagtccgaa gccgcgtcgt ctacgngac atgaagctgg ctgatacgga atcggatgcg 240
c 241

<210> 946
<211> 372
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-065-Q1-E1-E4
<400> 946

ctgggtgggc cactggcaat ggatcgtctg cggcagtgcc accaagctgg gttttcttct 60
gtttgtaacg tgttccgtag actgggacaa ggaggcagtg aangcaacgt acagagtgtt 120
agggtcatct ctcccgttag catgaaaaaa atgccagtgt tacatggaaa tcncatttga 180
aggcagttga acagaaccca gcagagaaag cgtgggaaaa aaactttcta tagtttgga 240
catctcaaga tcatagatag ctaccgggaa ggcaagaaga accacgacca gtatttttgg 300
attcatctgt actgttaaatt tttgtagcac tgcaatgggt tttcaggaaa ttatagtagc 360
ttggattgac tc 372

<210> 947
<211> 206
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-065-Q1-E1-E5
<400> 947

accacgcctc ggacctacta taacaattgt agatttgctt gctggtcact ctgataaaac 60
tagtgcattg catgcgatca aatgtaacgc tcgatgctgc ggtgctacca tgcacgtacc 120
atattcgcgt aagtcagatg acaaatcaag tctatatacct gcagactggg cttaccacta 180
actacctagt acctcctagc ttgcta 206

<210> 948
<211> 114
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-E6

<400> 948

gcgctgctca tctcaatcct cgagaaacgc atgccacgc gatcgagaga tagcgatcatc 60

gccgactgca acgacgatcg ctacatcctc gatgctcact cccggacaac tatc 114

<210> 949

<211> 369

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-E7

<400> 949

accacgcgtc gggcgcaaag ccaatcaata atcagcagcc acatcaatcc attcgctttc 60

ctctcncgct ccacttccat gggcaaggtt cggtccttct tcgcgcgctc ccgcagcggc 120

aagcgcggca gcgcccggag agcaggctcg tcctcgccgc actcctccgc ggccagcgcg 180

ccgccgtccc cgtccccact cccgaggagg tcacggtcgt cgtcgtcaac cacaaccagg 240

gacgagacgg agcgcgtggt ccgcaagttc gacgcnaacg gcgacgggca gatctcgcgg 300

tccgagctgg cggcgctggt cgagggcggt gggcacgccg tgaccgacga cgaggtgtcg 360

cgcatgatg 369

<210> 950

<211> 246

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-F1

<400> 950

cgcgtcgggc cctcgacttc tatttcaacg tcaaccggca ggtgtcggag cccaggatgt 60

cgtttcgcac gagcacgagc tcagggccgt ctctgtcggg cagcaactcc tcgcccac 120

tctgcngcac gccagccca ggtagccctg gtgcgcactc gagtaacgcc ttggagtc 180

ggaagatttg caaccagga gataaccctc tgctgtgtga agacaaggct caggcactgg 240

gctcaa 246

<210> 951
 <211> 292
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-F2

<400> 951

gtcggcctcg ctcattctctg cgcacgtgat agacgcccgt ctccgcctcg gctttcttct 60
 cctcctcgtg gccgcggcgt tcgcgccgt ggtctccgcg cagctctctg cagagttcta 120
 caanacgtcg tgccccgacg ccgagaagat catcttgggc gtcgtcgaga agcggttcaa 180
 ggcggnaccc ggcaccgccg ccggcctcct ccgcctcgtc ttccacgact gcgtcgcaaa 240
 cggctgcga ggcgtcgatct tgatcgagcc catgtcgaac caggcctccg ag 292

<210> 952
 <211> 246
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-F4

<400> 952

gcaaggcgac ggagacgggg atctcctgct gtcggtgct ggctggagtc ctgcagaccg 60
 acgcccgtcg cctctgcatg gtcgtggacg gcacgccacg tccttcggca tcgccatcaa 120
 ccagaccagg gcactggagc tccccggcgt ctgcaaggtc aaggcgccgc cgctcagcca 180
 gtgcacaggc gtccccggcg cacctgcacc gacgcctcgc gacgaaccag cagcgggagc 240
 ggagga 246

<210> 953
 <211> 313
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-B4

<400> 953

gcgtcggccg gcgtcggngg tgctggatca catgaccggc ggccccngg taccgattcc 60

gctggggcgc aaggactcgc tgtcgtcgtc gcgcaagagg ccnacgtcga gctgccacac 120
 gccaaacttca ccgtggaccg cctcatccag atgttcggcg ccaaggggtt cacggtgcaa 180
 gagctggtgg cgctgtccgg cgcccacacg ctgggcttct cccactgcaa ggagttcgcc 240
 gaccgcctct agaacttccg cagccagggc gggaagccgg agccgttcga cgccagcatg 300
 aaccgcctct acg 313

<210> 954
 <211> 462
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-B5

<400> 954

ccgctcctgc gcacgccatc cgatgcggtc actggccggg gagggctcag aaacctttca 60
 tccaatacat acatctatct gagccctttc gcgcggtgag gcccgaccgg agtccacaca 120
 cacacggtgt cgatggcggc cgtaataagg agccgccgcc gcgtgtccgt tttcttctac 180
 gtcgtcctcg ccgcagctgc agctgcagcc gcggcgcagg catccaataa cgtcacctcg 240
 gacgaggagt actgggcgga gcgcgccgag gtggctcggt cgcgcaacct cgccgcctag 300
 gtcagcgacg ccgtggccgc cacgaaccgc ttcaacgcgg acgtgctgag ggccacgacg 360
 cggcnggcgc tggcgaagta cgatggcccg tgcattggcga ccaaccccat cgaccggtgc 420
 tggcgctgcc gcgccgactg ggcgacggac cggaagcggc tg 462

<210> 955
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-B6

<400> 955

ccacgcgtcc gacaagccct ccacttcaag gaaaacaagc accgttttgg gttcgctaaa 60
 tcacggctga catatggtaa tattggggga aggttcgtga cagggagAAC catttggtga 120
 ggagtcatat cagaggggtg ccctggaccg gcttcttaag cttgcaagaa tagaagacga 180

tgacctgctg atcatgtcgg acgttgatga aatcccagagc ggccacacaa tcgatctctt 240
 aagtggtgac gacggcattc cagacatact tcaccttcag ctcaggaatt atctctactc 300
 gttccagttt ttcttgagc acaagagctg gagggcatcg atacacaagt tacaagctgg 360
 aaagacgacc tacgagcact tccggcaggc agacgagctc ctcgccgatt caggggtggca 420
 ttgc 424

<210> 956
 <211> 400
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-B7

<400> 956

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 tcgctccgac gcgtggtgga cgcagccagt gcgcgacgcc cccggctcct ggtccgttcc 120
 gcagttccgc accccgcttc gaccaaccag gcgccgccgc gtcgcgtcgc gtcgcctcct 180
 tttttttcgc cgcccgcgcg gacggcggcc tcgtgcgcca gaagaaacc acgcggcagc 240
 cgagatcctc aggtctcggc cgtctgacnc cagctcgacg gccagatgc agtcgcgcgc 300
 gccggccgtc gtgcgcctca gtcctcact ccctgcctc ctcagcggcg agtagagcgg 360
 ccaagcgggc catttttagg cgggagcgcg ggcggcgggtg 400

<210> 957
 <211> 442
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-B8

<400> 957

ccacgcgtcg gccgcctctc caccggcagc gtcgcccgga gtagcaagcg tctccgatcc 60
 gatccagcgt gcgagcatat cacggcgatg gaggcgagag cggccatgag ctggtactgc 120
 ggctcccttc tggccgtggc catcgcgtg ttctgtccg tgtcgtcgg cgtgcgcgcc 180
 gccggcgccg gcgccggcgt cgacatcagc gtgtcgtgtg cagcgacgcc ggaccgggac 240

gtgtgcctgc ggcgcgtcc acggcggaca gcgactccaa gaccccgcg gacctggcgg 300
 agggcggcgc tccgcgcggc gaccaccgct gggcgcgcgg cgggcgacta cgcgcggcac 360
 gagatggacg tggcgaacga caacgacatg tggcagtgcc tgaacgagtt ccccggggga 420
 gatgaggang cgctggacac ct 442

<210> 958
 <211> 378
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-065-Q1-E1-B9
 <400> 958

cgggtcgagg caccggtccg acgcggttcc ctcgggcgtg caagcgggtg agagatctgg 60
 ggcaggccgc cgtggtgccc cgaggtgggt gactcatgcc gatgctcccg aagcaccagg 120
 cacgcagcgg tggttctccc ctaagactga gtgatggcga tgctccagag gcgggcaggc 180
 aaacagcgac ggcattcccc agtcaaacga gtggcggcgt cgcaccctaa gctcagtgg 240
 aaccgtgatt gtgcgaggca caataggctt cggcaatgac ggtggtggcc atgggacacg 300
 cgggtatctc cgacaggcgc gtgacgcgca gtcgtctcca tccgtggtgg ccacatgaag 360
 cctcgttggc tcccgtgt 378

<210> 959
 <211> 182
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-C1

<400> 959
 tcgcccacgc gtccgccacc atccgacagt aagcgagtac aaaactgggt gtggaagtcc 60
 aggacgactg ttctcaacgg gcctcttcag cagtccgggg gcagaacanc gcaagtaa 120
 aggctcgact catccangca aagggcgcag tacccgagtc gtcacaagt accccgcgcg 180
 ct 182

<210> 960
 <211> 432

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-065-Q1-E1-C1
 <400> 960
 gggtcggcca cgcgtccgca ctaatccaag acaaaacatg gctgtgaatg tgagaaccat 60
 gtggtcgctg atgcggggcac aggttgcgat ggttgtggcg ttggtgttct tggtagagagg 120
 cgcattggtgc ggtcctccca aagtccccc aggcaagaac atcacggcca cctatggcaa 180
 ggactggctg gacgctaaag cgacatggta tggcaagccg acgggtgccg gtcccgcga 240
 taacggtggc ggctgcgggt acaaggacgt gaacaagccc cccttcaata gcatgggcgc 300
 atgcggcaac atccccatct tcaaggatgg tctgggttgt gggtcctgct tcgagatcaa 360
 gtgcgataag cctgtggagt gctccggcaa gcccggtgtg gtgcacatca cggacatgaa 420
 ctatgagcct at 432

<210> 961
 <211> 395
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-C2

<400> 961
 gcgtcggggc gaagcgaccc agccaatcga tcgttcagga aaaatacaag cttaccaaca 60
 acagcagcag caagcccagc cgttcgacga catggcccgc gtcagcgccg gggccgtgtt 120
 ggcgctccta gtggcggtcg cggcggtggc cgcgttcctc gcggtgccg cctcggcgag 180
 atccggggag ctgagcccga tgggttgctg gcgggcgaag gcggcancg gcggggccc 240
 cagaagtcct ccggcgcggt gggcgattgc gacgtggacg aggcggagga gctcgggctg 300
 agcgggggca gcctcgggtc cggcgacgcg ggtccggcgg acgctggcgc agcggaagcc 360
 gaccaaccgg gtcagtangt acgcggcgct gcgcg 395

<210> 962
 <211> 458
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-C5

<400> 962

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accacgcgtc ggccaaggtt gaacataaga aggtgccgcc aactcgtgcc aagtcaccaa 60
aattgacacg gagaaagagc tgcagtgaac ccgctcagac gccagaggga ggaaatggca 120
gtgcagtatg ctgccggttg catcgccaca gcattgggaa cgccagagat gttagcagca 180
aggcacaatg ttctccaaag agcgccctca aggctggatc agctactaga tccagggtca 240
ccaaatccat ggaagacctg aaggcttccg tgaanaaagt gggactgccca agcgccgcga 300
acttcgctct gcaggcgtga ctcagcaggc agtcactccc atatgccatt ttccatttta 360
atttatacct cacatcgcca ggaagatggg ctcggtgtag ttttgattg tccttgtaag 420
aacctggcta ccagagacct gcgctgttcc cgtcctgt 458
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<210> 963

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-C7

<400> 963

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accacgcctc gggctcggtc cttcgacatc aacaagttgg gcgcctccgg caatggcaag 60
acagacatca cgaaggctgt gcaggaggca tggncatcgg cctgcggcgg cactgggaag 120
cagagaatcc tcatacccaa gggcgacttc cttgtcggac aactcaactt cacaggccct 180
tgcaagggcg acgtgaccat ccacgtggat ggcagtctgc tggcgaccac ggagctaagc 240
cagtacaagg accgaggtaa ttggatcgag attctacgcy tggataacct ggtcatcacc 300
ggcaagggaa gccgttgacg ggcacggccc agctgtgtgg agcaagaact cctgcaccaa 360
gaggtacgac tgcaaggctc tgtcggactc gctggtgatg gacttcgtga acaacgggga 420
ggtg 424
```

<210> 964

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-C9

<400> 964

gggtcggcca cgcgtccgga ctagacgtgc agcgattctc gatcatgctt gcgaccggct 60
ggcattttgt cccgacgctc gccgccggtt ggttgatcc gtgccccccc cgatcgatcg 120
actgtgcgta tggatgatt gggtagctgt tgccgtgttg gaggtctggc gtccggcgat 180
ggcacaccac agcggcgcg ggcggcgcg cgggcgagcc atggccatga atcgatcggg 240
tgtccagatc cgggtggaggg aggtccggcc aggcagagcc gcagccagcc tgcgttgcg 300
ctgcctgttc gaagtgatcg atcagccgga ggatgccgcg gaggtatcag attccgattc 360
ccggccccag ccgccccgt gctcgtgcaa acctgtcctt c 401

<210> 965

<211> 251

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-D1

<400> 965

cgcgtcggtc tttttttttt ttttcgatga gcatttaagt atttttgggc aggaaagaac 60
acataccaga gatgaggttg ttggttgaat ttgattcgaa gtgctaataga agagaattgt 120
gagctccggc ccggcgggtgc cgccctcggg gttgtgcatg tagtacgtct ccgagtcctg 180
tggaccgacg aggcggtcga aatgcgcgcg catgtaagtg agctcgccgt ccgacgggtg 240
ggacatatcg g 251

<210> 966

<211> 392

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-065-Q1-E1-B2

<400> 966

gtgacggcgg cgcggaggct caccaaggag gaggtcaaga cggccgcgac gcccgaggcg 60
cggagggcgc tgaacctctg caagacctac gacctggacg ccgcccacaa cctcngccgc 120
ctgcaagcgc gccatcggct tccgcgacgc cgtcaccatc cgcgccacga tgagcatggt 180

ggcgcaggac acgcagaact gcgaggagga gttcaggaag gccgtctccg aagaacccat 240
 gggggagcac agcangtcgc tcactnagat gtccgagatc tgccgcacgc tctccaacat 300
 ggtcgcctac gaacatgtcc attgatttgt ttgtttcctt ttcccgcacgc cctactacgt 360
 tcggtagagt cgtcgtcgtc gtcgtcgtcc gg 392

<210> 967

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-H2

<400> 967

ggccgaggcc cgcgtccgaa gcgaccgggc ctggtgggtc cttcgacatc accaagttgg 60
 gcgcctccgg caatggcaag acagacagca cgaaggctgt gcaggaggca tgggcatcgg 120
 cgtgcggcgg cactgggaag cagacaatcc tcatacccaa gggcgacttc cttgtcggac 180
 aactcaactt cacaggccct tgcaagggcg acgtgaccat ccagggtgat ggcaatctgc 240
 tggcgaccac ggacctaaagc cagtacaagg accatggtaa ttggatcgag attctacggc 300
 tggataacct ggtcatcacc ggcaagggaa accttgacgg gcagggccca gccgtgtgga 360
 gcaagaactc ctgcaccaag aagtacgact gcaag 395

<210> 968

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-H4

<400> 968

gacgcacgag gccacgtggg gacagcgaga ggtgaaccag cagcctccaa taaaagccag 60
 cacatccaaa taaaaccgag agacctcagc cctcaggcaa gccgaccgcc gacgtaccac 120
 cgcgccaacc cgagagaaaag atggagatga tcaagaggat cctcatcgcc gcgctcctcg 180
 tagtcgccgt ctcggccacc gcagtgtgtg cctccaccga ggccgccgcc gccggcgccc 240
 cagccgcctc cgagtcgtcg gcgtccgccg aagccccgcg tggcgccgcc ggcgccggcg 300
 ccggcaccgg caccgccgcg gggccctccg ccagcggcgc cgcgcccgcc ctgcgccgcg 360

cgcccgccgc gctcctcttc tccctcctcg

390

<210> 969

<211> 76

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-H8

<400> 969

gaggccgggc ccgtgctgtc catgtgcccg gcgttcgcca agccagcaca tccaaataaa 60

accgagaatt aaatag 76

<210> 970

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-H9

<400> 970

cacacgcgtc aggcgaagca acagaacgtg aactaaaagg taagaaagag gacaggttta 60

cgagagaacg aagttgaaag aacaaagtgt aacgcggcgt catcatagat atccgaaagg 120

actacagcac caaatatata ccacagagtg taagagaagt cgccgtccgg acaaacgtgc 180

acggtacgcc acgagcaccg caaccactt cagtgtcata tccctcatca gactgaacac 240

gaccttgagt accggttacg gagcgagtcc acgtccggca agagacgggg cccaacgatt 300

cggatttctt caccgatctc ctgaagaggg t 331

<210> 971

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-A11

<400> 971

gagacttcct cgctccatc ccatcccgcc gccgccgtct ctacggtcgc taataagccg 60

ccgcatccag ggatggagat gaagaagatc gccgcgcggt tctcgtcgc cgctcggcc 120

accgtggcgc gggccgcgga ggcgccggct ccgtctcca ccagcggctc ctccgcggtc 180

gcacccgcca tcgtcggggc cgccgtggcc tccttctctg cgtaccacag tcaactgagcc 240
cccggccgag gagccggaac cggagggaag agaccaaggt ggggggagag acttggctgc 300
gcctgcgccg ctccgcggct ccgcgcattc cc 332

<210> 972
<211> 90
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-065-Q1-E1-A2
<400> 972

cgctgggcca cggcacgctg cgctggggcg tcatccancc cggcccgctg tggatcatct 60
tcgcgcggtc catgatcatg cagctctcgc 90

<210> 973
<211> 206
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-065-Q1-E1-A4
<400> 973

gcgtccggct tctactggag gatgctcagg tggcgccgat gctggcgctg gcgctaccgt 60
angtgctggt gtctctggag gcgctaaagt tggcggggg cgttgnacga aacggcgggga 120
agaagtggca aggcgtatac aggaaccggt gccgatgcgg gtgtttccgg tggaaggatc 180
ggtggcgctg atgctggtgt ctccgg 206

<210> 974
<211> 343
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-065-Q1-E1-A5
<400> 974

gccaaagttac gagcagcaag cagagatcag atcatccatc ggcaatgtcg aacatcgggc 60
agtccgtcga ggccggcaag gcggaggccc gaggcgagta ccaggcgag cagcgggcgc 120

agtgcgtcaa ggacaccgcc ggagccgcgg ccgacagcgc gcagctgcag cagcaccgcg 180
 ccaccggcac cgttgagcag gtggcgagcaga cgggccaacg cgtggcggca ggcgtcaagg 240
 acacggtggc gggcgccgcg gttggcgtgc acaacacggt cgcgggcgtg cgagcgggcg 300
 tcacgaacac ggtgaccggc gcggtggcgg gcgtcacgaa cac 343

<210> 975
 <211> 448
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-064-Q1-E1-H10

<400> 975

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 ggggccaagg gcattaacia cggccaacia taatggggca aaacattagg gatattgccc 120
 ctgggccttg gtgggccttg ctgggtggtt gccgcagcgg cggccgtggc caccgcgtac 180
 ggctgctacg acgactgcta cgagcgtctg gccaaaggga aagaaagacc ccgcctgcac 240
 caagatgtgc aaccaggcgt gcggtctcac ggaccaaggc gccggtgccg ccggcgccgc 300
 gccggcttga tcgcccagcg cattcatcgc ttcagctcga tataatcgct gtcctgtag 360
 caaccacat atgattcgat taatcttctt cctctaattt ctcgaccgag tcgaattttt 420
 ttcctttcga ttcctctact aaactact 448

<210> 976
 <211> 297
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-G10

<400> 976

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 cccgggatct ccaaggtag cttcaccgac gtgacctgcg gccctggcca cggcatcagc 120
 atccgatgct tagggttggt cagggaacat caggacttca gggcaagtag catgcaggat 180
 tgacttctgt taaaacaatc ttctggcttc gtctattggc attagacgta tgcgtcgct 240

ttcacaagtt cacgttgatc cagtacgaca ttgcacttg ttacgtttga cccacgc 297

<210> 977
<211> 443
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-064-Q1-E1-G12

<400> 977

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acgccaggcc gcccggaac attcaagaag gaaggaaccc caaaaacccg gcggcgga 120
caatggctcc gcgcacctca tcggcgga cttgcctgtg cctcgctctc gccgcggcca 180
cgctggcgct ggcccacggg gcccaaggag gaggaccatc ggcatcggcg gcggacctgg 240
acaaggtcac ggccgagacc ttctcgaca tcgagatcga cggcaagcct gcaggccgga 300
tcgtgctggg actgtttggg gacaccgttc ctaaacagc agagaacttc cgagcacttt 360
gcacagggga gaaaggaatg gccaaagtcg gcaagcctct atggtacaag gggtcgacgt 420
tccacaggat catcccgggg ttc 443

<210> 978
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-G4

<400> 978

gcacgcgtcc gaaagtacgt cgatggcgac ggtgacattg tggcagtga cgtcaaggag 60
aagggtcttg acacgtacga gccctaag cactcctggg gcgccatctg gaggaaggac 120
agcgacaaac cgcttaaggg accctcacc gtccgcctca ctaccgaggg aggcaccaag 180
tccgtctacg acgatgtcat cctgccaac tgggaaggcca acaccgcta caccgcaaaa 240
taattaactt tagtgctgac aatacttta gccggcctat gctagctata ctagaattgg 300
ttggatccca agcaatgcat tacacatgca tgcattggac cgtgatatct atttgctacc 360
actaccctat tacgacagtg atgctggcgc caacaatgat ggtgtcatcc tcccttctcc 420
a 421

<210> 979
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-G9

<400> 979

cacacgcgtc aaatcgtctt gggggaaaac acatgataga cctaaagaaa gctcaggcct 60
gcgcataagga cttttcgaat ctggaagggc ctagccacga aagccatcag ggcctagagg 120
agtctcgac aggtttcgat tgaactccgc tacgaggggc gttacaacgc aacgagagca 180
gtctggagag catgggcatt gggctttgac ggagagagga tggccaagtc cttcatgacc 240
aagggcaacg tcgttgctgt atgtgacaac ttcataaggcc cttgcaaggc cgacgtgacc 300
atccaggtgg atggcaatct gctggcgacc acggacctaa gccactacaa ggaacatggt 360
aattggatcg agattctacg cgtggataac ctggatcatca gcggcaa 407

<210> 980
<211> 328
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-F11

<400> 980

attccgggca gacacacgcg tccagaacgg ttgccaaatt ttggcgcgta tccactaatg 60
cacagcattt taggattgcy ttgacttctg tgcaccatcg cacgagacat atttatattg 120
tacgttgagt ataagacatc tgggactcat cattcatccc aaacttcggt cgatggaagt 180
cgaaacgtct tatcggtcaa tatgagtata ggggtttgac agcagtctgt tgcattgagta 240
cttcgtgttg ataagtctct acatacgtac gtgcatgtat taggacaaac cagtggaaca 300
gtaagtttac gatgtccagg tgaccgtt 328

<210> 981
<211> 63
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-D8

<400> 981

tctttatcac gccagatgcc atcgcccaag accccgctac ctgggatcac tcccctgcgg 60
acc 63

<210> 982

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-E10

<400> 982

acgcgtcaac acacgcgtcc gaatcctcgt gcacaacttt cttcttctag ccctttgcgc 60
atatcttgct gtttttggtt tactgaacat gcaaaatacc atcgacgaat tttccctatc 120
aggcgatctt tccacactaa aagttgcagc agaggattgg tcagacacgt atatcgggga 180
ctttactaga gagggcgctca aggacagctt tcgacactta tttttgttac acaactcgcc 240
aggccatgac cagtttttga ctaacgacac ctcaatatct ggctcatcta tagaacctca 300
ctaagtgcct gagtgggttc cttttcacga tacttcttcg gatatcactg tcagttcggc 360
caatttcacc agctcccgtg 380

<210> 983

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-E11

<400> 983

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ttttcatagt tactagaatt ggaagtttga tcaaccgctt ttatcagttg acgcatcagg 120
gatattcacc ctttggcttc atggtgctcc atgcagttac gcagagtttg caaggttttc 180
tatttggact tatttatatt taccacgaaa gagcactagg ggaagttggt ctattcattc 240
gtcgcaagtg gagtgcgaga ggggatttgc gcgaggattc ttttatcgca ttagagaaaa 300
gaggacttgc tcatttttca caatttgatg aagacgagga ccacgaggac aacatggatt 360
cgcagagtag ttcccttgca ttttg 385

<210> 984
 <211> 370
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-E2

<400> 984

acgcgtccaa gggaaacgctt acatggtctg atcatgacct acattttgca tgcattccatg 60
 gtatctcatc cttgatgatg atctatctca ctagttcttt ttaatttccg cttcatgggc 120
 gtttccaaat tcgatttgtt ttcattccggg tgtgttttagc gggacatctc ttgtctgatc 180
 ttcttgctaa atacaattgg actcctatat atagaggcct tccggcacat ataatatata 240
 tcggaccaac attattgtga tcactaatta tgtctctata tggtgccacg gggataaaaa 300
 attttttttt tttataaata ctgaacgaca cacatcacca tgatatataa aatttacctg 360
 gcaaacatta 370

<210> 985
 <211> 281
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-E8

<400> 985

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 gtggtgagca accgcgggac acgtgtgtcc cgttgccttt ccttcgcttc gacggcgagg 120
 gcacctgttg gcctcgcatg gctctggcgg gggccaagca tcgaagctcc atctcgcccg 180
 gctgcccagc gccgcagcgt ctattcaaac ccagatccgc gcgatccccg ccaatcggca 240
 atccctgcac cttgcctcac cttatctagc tcagctgcat c 281

<210> 986
 <211> 340
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-E9

<400> 986

cacgcctcca cggattcgtg ggaaactgcc gggagacaga cggtcacacc gcgacaggaa 60
 gggagtcaac ggaacagccg tgggagaaga ccatactgaa tcgcctcccg cccacggatc 120
 tggcgtctct ggtcagccct ctccctctcc ttcccggggc cattgccggt gcctcgcccc 180
 ggccgctcgt gctctacaaa cgactacgat gcgcggctgc gggagctgca gcggcatcgc 240
 cactggtact tgatgagcac cgcgggtgca ggtccggagg accccgccta cttgcacttg 300
 tcggtggcgg cgggggatct ttttatcgac gaccacagc 340

<210> 987

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-F10

<400> 987

tcgcaaataa gccgccgat caagggatgg agatgaagaa gatcgctgc gccgtcctcg 60
 tcgccgcctc ggccaccgtg gcgctggccg cggaggcgcc ggctccgtct cccaccagcg 120
 gtcctccgc ggtcgcaccc gccatcgtcg gggccgccgt ggctccttc ttgcgtact 180
 acattcactg agccgccgga cgaggagccg gagccggagg gaagagacca aggtgggggg 240
 agagacttgg ctgcgtgcg ctgctctgct gtcgccgcgc attcccgatg cctgggcgtg 300
 ccctgattgg gcacggccgt ggcagtggca caccttcgtc ttccttttgt ttgttttttt 360
 tcctt 365

<210> 988

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-C10

<400> 988

cacgcgtcca caaacaggga ctcgacagat atggcttccg gtgttgcaat agacgataca 60
 tgcggaaagg agttcactgt tcttgtaga agcacgcaa gaaagtaccg tgctattatt 120
 tgcaaactca ctgatgacct gtcttctgta tgtgtggaaa agacgcttcc cgcagccaac 180
 ataaccaagt gcagtgcaca agaagactgg aaaaagtgtg tgactgaatt gccccaaaac 240

gattgtcgtt ttgcagtata tgactttgag tatcacactt ctgaatgtgt ttccaagaat 300
 ataataatat ccattctttg gtcacctgaa actgcgaata ttacgtccac gatgttgtaa 360
 tcttctatca gagaagctct tgttca 386

<210> 989

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-C11

<400> 989

taccggtcgt atatctcggg ggctcgaaca cgcgtcaaga gaatggcatc accttcttta 60
 caagtagaac aacgaccagt cacggaaacc tattgtatgg tctaataatcg gagtgggtgc 120
 agttcttcaa ctgtttgaag ttactactcg tggacagccg tttgaagtta tcaagacaca 180
 gcttgctgca aatcgaaagg acagcatgat ttctgctttg aagactatct attctagagg 240
 aggcattatg ggcttttaac aaggactgat tccctgggca tggattgaag ctagtacgaa 300
 aggcggtgtc ttatttttgg cgcataatga agcttctacc tttgttgctg cgttgggatt 360
 ttctccaacc gtttcagata cggtaggatg tacatttggg ggtgtcgcac aagcttatac 420
 tactatgggg ttctgtacgt ttatgaaaac cg 452

<210> 990

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-C5

<400> 990

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 ggctctcttc tgcacgtgac atggtgagaa ggaagagtca aagggtcatc atgcgaaagc 120
 gtccgggcct ggtgggtcct tcgacatcac ggggttgggc gcctccggca atggcaagac 180
 agacagcacg aaggctgtgc aggaggcatg ggcacggcgc tgcggcggca ctgggaagca 240
 gacaatcttc ataccaagg gcgacttcct tgtcggacaa ctcaacttca caggcccttg 300
 caagggctac gtgaccatcc aggtggatgg caatctgctg gcgaccacgg acctaagcca 360

gtacaaggaa catgggaatt g

381

<210> 991

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-D11

<400> 991

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tttggtgtct cgttttgaac ttgtgaataa taaagatgcc tcctgttgca ccattgtttg 120
gaatctcacc aaagacagtt aatcgtgaac ttgagcactg gatgagcaac ctaaataag 180
tccaaagtgt gataaatagt gtcgaacca agttgaatac aactccagcc aagtggaaag 240
ctctctccca acacgtgaaa gaagtctctg aagagttgag tcatattcaa taaggaggat 300
cctcattatg atgttattgt ggcaggagta caagctagta aaaattttga aagtgcagaa 360
gcagacattt ccaaaaacga tggatttaga gaacgagcga tgacaagggt gagaaagtat 420
cgtgacgaaa tcgaatctct tcgt 444

<210> 992

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-B9

<400> 992

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gttgcttctt ggacgtatgc cgctataagc aaaacggagt gacaaagttg gaagaaaatg 120
cctcgagcag gtaaagttgt gtctcgctcg gttgtaggag gtgaccgaaa cagaagagaa 180
ccaacactta taaggattgg tcaacctcaa gttccacta ccgcgaaaag ttcgactagt 240
gccaaaccac atagatatcg tccaggtacg agagcgctga tggaaatacg caagtttcaa 300
aagagtaccg acttgttgat tcgcaagtta ccgtttgcac gtctggttaa ggaaataact 360
cagcactatc atcacgaact tcgctggcaa gtggaggcag tactagccct tcaaacaagt 420
gcagaggact acctagttgg tttgttgga 449

<210> 993
 <211> 186
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-B3

<400> 993

gcgtccagtc cagtatcaac gtacccaggg gtgcggcggc ggggtccgta caggagggtca 60
 atgacgcctt gacgaacatg ttccccagtg agaccgagat cgttgtcaaa attcagggtcc 120
 ttgctggtgg ccgtgggctg ggatcgtgcg caactgtgct gcacggaggt gtccatgatg 180
 ttaccg 186

<210> 994
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-B7

<400> 994

gaaaactagc ttgcagcatg tagcattcaa gtggggctta gcagctatct cacacttcct 60
 gcctttttaca ctgaattagt ctgtgccaat acgagatact gagggatgaa atagctacga 120
 aggggaataa caggcgacga atgaaggcaa agaatgcacc tatgataagc aagctaactg 180
 ccatagtttg ccagaatgt cagggtactg gaattcacgt caacggagat gaacttgata 240
 agccaggcat ttctttaaca gagatgtttc ttttcaagat gaaagcaatc tattttcaca 300
 aatcatggct gaatagacct gaaatgcttg aaaactgttc cactgggcct catttcccct 360
 ca 362

<210> 995
 <211> 214
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-G7

<400> 995

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ctttcctaaa aaaatttaaa taatttccat ctgcgattat tttagtagct accattcatg 120
 ttttctgagt agttgtataa atgctaccac cgtcatcttt tgtaccggc cggaacaaac 180
 gaaaaacaca ctatctatgc tgtgttgtga attc 214

<210> 996
 <211> 328
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-063-Q1-E1-G8
 <400> 996

atcaagctca tcaagtgcta gtctgatctg ctgccgcatc actgagactc tgtatcgag 60
 tccagtgact atccacagca gcagcagcag gtcctcctcg acgactcagt aggcattggac 120
 tgctaactgg taatcaacag ctaacctgcg ctctgccact agtgccctga agaaatcctg 180
 caagtcaacg acttcaagag agcggggctg catttcggcc tcgagcactg caagaacctg 240
 ctccacagca tcaactctta aagaaccggt taggccgacc tgcacgctgc cctagaccgc 300
 gctgaacaca tacgtctgct gtacaaca 328

<210> 997
 <211> 347
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-063-Q1-E1-G9
 <400> 997

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 aacggctttg acaggtgcga tcccctaacg cactcctggg gcccacatctc aggggaaggt 120
 gaggggcca ccgcttacgg gacctctcac cgtcgggctc actaccaggt ggaggcacca 180
 cgtccgtcta ccacgatctc atccctgcc cctggtaatg cgatcaccgc ataccgccc 240
 caatagtga cttctactgg tgacaatcct ttacgccggc gcatgtctac cactaccaca 300
 attggttggg tcccacccaa tgcattacac ctgcatccat tggcccg 347

<210> 998
 <211> 351

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-063-Q1-E1-H3
 <400> 998
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 tctccaacct gtgaaatact cccggcctgg attacccttg ttgggttttg gagaggagat 120
 tttggacaat gctttgacta aggcagaaaa aaataagatc aatttacatt tgggtggctgc 180
 agaagaagct cttgcattgt cgatatggac tatggctaca gtttgtcggt ctctgtcttt 240
 ggaaagtgtg ctaggcttat tcaactggagt tttgctggag aagcaaattg tggtaatatg 300
 cccaaatctg ggtgttctgt cagcaattct tttgtctatt ataccgatga t 351

<210> 999
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-063-Q1-E1-H4
 <400> 999
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 agttgagcag cagcaaccac tgcacaagat gtcgtggcag acgtacgtcg atgagcacct 120
 catgtgcgag atcgagggggc cacacctgag ctctgccgcc atagtcggcc acgacggcgc 180
 cgtttggggc cagagcaccg cattcccaca gttcaagcca gangagatga ccaacatcat 240
 taaggacttc gacgagcctg ggtttctggc cccgatcggc ctcttccttg gccccaccaa 300
 gtacatggtc atccaaggcg agccccggcg tgtcatccgc gggaagaagg gatctggagg 360
 cataactgtg aagaagaccg gacaagcgct ggtgatcggc atctacgacg agcccactga 420
 ccctggac 428

<210> 1000
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-063-Q1-E1-H5

<400> 1000

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gtggccgccg atgtcgccaa cgccggccac gccaaagccc tgacgcctgg cgggcgcgtg 120

gtacaccaca accacggcaa gttcacggcc gggccgtgga aaccgcgcca cgcgaccttc 180

tacggcgggc gggacgggtc cggcaccacg gcgggcgcgt gcgggtacaa ggacacgcgc 240

gcgcaggggt atggcgtgca gacgggtggc gtgagcacgg tgctgttcgg tgacggcgcg 300

gcctgcggcg ggtgctacga ggtgcgctgc gtggacagcc ctagcgggtg caagcccagc 360

gcggcgacac tggtggtgac ggcgaccgac ctgtgcccgc ccaacga 407

<210> 1001

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-H7

<400> 1001

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cacattctcg atgaacacac gtatgtcacg cgacgctcgc agttacagtc ctccacctga 120

ccgctgcaga atggcgaccg ctaagcgtag catacggcat gaatctccat cacatcacia 180

gagccaagga cgacggaaca gtactaaata tactatacga aggtttaact cggtcacaat 240

gacgacaacc aactccatga cgtcttcgga cactagacct gttcgattag aaattaacgt 300

catttgcgac atctcaagga tcatggatca actgaatga gctagatata attgtctgcg 360

acgcatcttc tgatacatat aactatacat acgttttgca aa 402

<210> 1002

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-H8

<400> 1002

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tcgtggcaga cgtacgtgga cgagcacctg atgtgcgaga tcgagggcca ccacctcacg 180
 tcggcgggcca tcgtcgggcca cgacggcgcc acctgggctc agagcaccgc attccccgag 240
 ttcaagcccg aggagatggc tgccatcatg aaggatttcg acgagccggg gcacctcgcc 300
 ccgaccggcc tgatactggg aggcaccaag tacatggtca tccaaggcga acctggagct 360
 gtcacccgtg gcaagaaggg gatcgggggc atcactgtga agaaaac 407

<210> 1003
 <211> 487
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-G6

<400> 1003

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 ggtacaccac aaccacggca agttcacggc cgggccgtgg aaacccgccc acgcgacctt 180
 ctacggcggg cgggacgggt ccggcaccac ggcgggcgcg tgcgggtaca aggacacgcg 240
 cgcgagggg tatggcgctg agacggtggc cgtgagcacg gtgctgttcg gcgacggcg 300
 ggcctgcggc ggggtgctac aggtgcgctg cgtggacagc cccagcgggt gcaagcccag 360
 cgcgggcgcg ctgggtgtga cggcgaccga cctgtgcccc cccaacgacc agcagtccgc 420
 ggacagcggc gggttggtgc aaccgccgcg ggagcacttc gactcagcat gcccgcgttc 480
 ctccaga 487

<210> 1004
 <211> 391
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-F1

<400> 1004

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 aattactaca attttggttt tgaccactat gagatgtcgt ggaggaaagt aggcttttca 120
 ggtctaatta atctactgct ggggcacacg ggcccatttg ccagcgggga ttggattcta 180

cctgacctca caatccaagg atccatgaaa ctaaactcta cacttaggac ctttcccaat 240
acattctact tcagctatgc tacaagaaa acaagaaaaa tatttggaat tacagttcct 300
tcaagtgttc ttggagtgc cccattctc tttctgagag tcctccagat gtgtatgtgg 360
cggcaacctt caaaatgcac ctctgcctta c 391

<210> 1005
<211> 91
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-063-Q1-E1-F12
<400> 1005

gaccacgca tccgaccacg cgtccgcca cgcgtccgcg gacgcgtggg cggacgcgtg 60
ggcagcgatg aaaaaagtta agcgttaaca a 91

<210> 1006
<211> 400
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-063-Q1-E1-F3
<400> 1006

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catggaactg acacattaga ttgtgaggaa tttgtgacag tcttgcttca cattaaaaag 120
atgagtaatg acgagtatct acctaaagct ttcgagttct tcgacaaaga cgggaatggt 180
tttattgaaa tgtccgagtt aatggagact ctaagtgatg gtgaactaaa gcctgatgag 240
caattgggta acgacattat tcaagaggtt gacaaggata aggatgggtc catcagttac 300
ccagagtttg aattgatgat gaaaagtgga tcggactgga ggaacgcctc tagacgttac 360
tcaacagaga atttcagcag cctcagtcaa aaaactgtgc 400

<210> 1007
<211> 426
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-063-Q1-E1-F4

<400> 1007

gcgctcgcccc aggcgtccgc atcgcaatcg cacaccgcct cncctgtctn cctccttctc 60

gccccggcacc gtcgagctcg gctgtggaaa cagaacanac ccatcaacca tggcgaactc 120

ggcgtcgggg atggccgtga gcgacgagtg caagctcaag ttccaggagc tcaagtcgaa 180

gcgaagcttc cggttcatca cgttcaagat caacgagcag acgcagcagg tgggtggtgga 240

caggctgggg cagccgggcg acacctacga cgacttcacc ggctccatgc ccgagagcga 300

gtgccgctac gccgtcttcg acttcgactt caccaccgac gagaactgcc agaagagcaa 360

gatcttggtc atctctggt ccccgacac ctcgagggtc aggagcaaga tgctgtacgc 420

gagctc 426

<210> 1008

<211> 484

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-063-Q1-E1-F5

<400> 1008

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cagcatgttg gaaggctcgtc agtgtcaaca aaccaggatc tgcctttcaa ggacgtagcc 120

aaccaatgtg aagcacttct gattgggaag cagcaaaaag tatctgcgtg catgagtgtc 180

tgtgaaaaag aggctggtga atcttccgtc gagcagtcac ctcggcagga tcctcaagca 240

gatacgtttc tctgcacagc tgatgaacaa tggcacccca attcctgtaa gctgccagcg 300

ctgtgtcnct acgaccggtt ccttgcaacg tctgggtgct aagatgatct cttctgcgat 360

gtggatctct ataaccaaga acgtgttcag tggacgccta annaattggt ggttccagag 420

ctcatgcatg ctaaaatatg tgctgtcgtg tgtgagtga gatgacatga tttccctggt 480

ttgg 484

<210> 1009

<211> 484

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-063-Q1-E1-F6

<400> 1009

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tccttactgg caacctccag gacaatttct ttgccagttt cgctctgggt tggctgatca 120
ctaattggtgc tggctcttgca tcttacccca tcgataccgt ccgcagaagg atgatgatga 180
catctggtga ggctgtcaag tacaagagct ccttggacgc gttccagcag attcttaaga 240
aggaagggcc caagtccttg ttcaaggggtg ctgggtgctaa cattcttcgt gccattgctg 300
gtgctggtgt gctttctggc tatgaccagc tccagatcct cttcttcgga aagaagtacg 360
gctccggcgg tgcttaaattg gagaaatatg atgacgaaca agagcagtgt gtgttcncgg 420
tcctttccaa tcanggatct ggtgaagttt ttgcctttca tatcgaagaa attaataatt 480
catg 484

<210> 1010
<211> 276
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-F7

<400> 1010

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tccttactgt cagctcttca gtatcctttc ttgccattt tcgctctggg taggttgatg 120
actaatgtta atggctcttg attgtaactc atcgatacct tccgcagtgg gaggatgatg 180
acatctggta aggctgttaa ttatgcgagg gccttggatc cattccagct gattcttact 240
atggattggc ccacgtacct gttcaatgct gctagt 276

<210> 1011
<211> 489
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-063-Q1-E1-F8

<400> 1011

accacgcctc ggccgacgcg ctccgacgtc actgccttgt gggccttacg tgggcctcat 60
 ggcttaaaat gccatgcccc agcaactaca cgagtcaaca caggcccggc ccgcccggc 120
 ccgcccgaag aacccccatc tctcgattcc tccaacaaat tcccccttcc cttactcccc 180
 atccccaccc acccagccg acgagcaaac cctagcgagc gagagagccc ggagccgaga 240
 gaccagccag ccatggcgct gcgtgccttg tacaacgaga tccggagcat gaaggtccgc 300
 gacgtgccgg cttacctgaa gccgcgcttg acctgngaca acgtcaagaa gagcgccgac 360
 caggccgtcg accgctacat cgagaagtac atcgacacga gctcgccgga ccctctctna 420
 cacgtctgca tcggagggat gatcttctcc tacttcgtca atctgccctg ngaagcgcg 480
 caactcgcc 489

<210> 1012
 <211> 369
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-G1

<400> 1012

tccggaacga catcgcgctg ggccgtgcga cgtctgctgc aagcacgccc catccacgcc 60
 cgtcaaaacc acgtgctcg ccaagaacaa ggacttcgag gcgctcatgc gcgtcgccca 120
 cgcgctcatc aagcggggcca ccggtggcgc cggtgaccgc cggcgccggc gcccgcgcgc 180
 cgcgccaaga ttcattaatt gattattaat tcgttgatta atccgcggag cgccatacat 240
 atctcgatcc atattgtatt tgtttgttta tagtatatat cgatgtgggg tacgtttata 300
 tgtacctgcc attgtcattt gattaggtac gttgttgcaa acttttacca cagtatttat 360
 cttcacatc 369

<210> 1013
 <211> 264
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-G3

<400> 1013

gcgtcggccc ggccgcggca aggtcgaggg gatgccgctg ccgccgtcct acgccccgc 60

gcgctaagac gacgaaggcc tcgtttttctc ctctgtggtct gaccatccaa tccaaactca 120
aaagaacaaa tacgaaagaa gcgtagtgaa ggggaacaaa tgaatggata tatgtaatct 180
tgagatgcat gccctctcaa atcactgtac tggggttctc aaaaaaatc attgtaatgg 240
gagttatata tataacttta tctc 264

<210> 1014

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D6

<400> 1014

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acacgatcga gctcaaggac agccacgagg aggacatctg ccaggtgggtg ctggtggcca 120
gcccgcgcaa ggactgcgac gaggtccagg cgctcagga cgcgcgccgc gtcctgctca 180
ccaggaacgt tggcatctcc gacagcctgc gcccgcgcaa cccgctaggc tacttcaagg 240
acgtgccgct ccccgctctgc gccgcgctgc tcaagcagct ggactcggac gacgacgacg 300
accagtaaac tataccacgg cggcgctcgcg gacatgctgc aaaaaactac aacgatacag 360
agcgaacgca tggcatggat agcagtatct acggaagaa aaggaagaaa aggaaaatta 420
aaaatgtatc agagtgttg attca 445

<210> 1015

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D7

<400> 1015

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agccgccaat gcagaggaaa aggtcgccac cgccgccgag accacgacga cgggtggaggc 120
gaagaagaag gacgtcgagg aggccaggaa ggagaagcag gcgcagcaaa gctgaccgac 180
tgtccgtgca tgcgcgtgcc aactaatata attattggct gatgatacct gatgatcagt 240
gtgtgatcga gcaaggagac gacacttgaa ttctctacag ttggcatagc ggcataaggc 300

gggagagaca ctctcgactg gccacaccat gtaacaaact aaccttcttc gatgtctccc 360
attattttcc tccacggagt tcttctgatg aaacaacatg ttctaattgg gcttat 416

<210> 1016
<211> 542
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D8

<400> 1016

accacgcgtc ggccgtgtcc ctcttctctg accggcaccg tcgagctcgg ctgtggaaac 60
agaacaaacc catcaaccat ggcgaactcg gcgtcgggga tggccgtgag cgacgagtgc 120
aagctcaagt tccaggagct caagtcgaag cgaagcttcc gggtcatcac gttcaagatc 180
aacgagcaga cgcagcaggt ggtggtggac aggctggggc agccggggcga cacctacgac 240
gacttcaccg gctccatgcc cgagagcgag tgccgctacg ccgtcttcga cttcgacttc 300
accaccgacg agaactgcca gaagagcaag atcttgttca tctcttggtc gccggacacc 360
tcgaggggtca ggagcaagat gctgtacgag agctccaagg gacgggtcaa gagggagctg 420
gagggcatcc agctggagct gcaggccacc gaccccgagc agatgagcat ggacattgtc 480
atggcgcgag ctctctgaag aggaagacgc gcatccgctc gcgcgatcgc catgcatgcc 540
cc 542

<210> 1017
<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-E1

<400> 1017

gcgtcgggag ggaccacgag tatccacatg aagcgcggtg tctgccggag gcgctggctg 60
tgcacgtggt cgccgctgat cgcgagccg gggcgcgtct cacgggctat aacgctctgc 120
cgcagtacga cggtagtgag cagcactacc tggcttatag gtcgccgagc gcgccgccga 180
ggaccggatg gtggccttca cgtacctgcg catgggcccc gacctcttcg acccggacaa 240
ctgtcggcgc ttcgctgcct tcgtgcgccg catgaacggc gccgggtcgt gc 292

<210> 1018
 <211> 441
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-063-Q1-E1-E3

<400> 1018

ctgggcgagc gagtgggac gtctcactca cccgccttc acgcctccct caccaaataa 60
 ggtcccgccc ttttccgaca ttcacagggg ggacaggaaa tcagcggcca tggcctcgat 120
 tccggcgacg accttcgccc tcattcttct cgtcctcttc tgtgccgagg ctggcaccgc 180
 cgtcgacaac gacctccccg actacgtcat ccaggggcgc gtctattgag acacctgccc 240
 cgccgggttc gtgaccaatg tcaccgagta catcgcgggc gccaagggtga ggctggagtg 300
 caagcacttc ggcaccggca agctcgagcg ctccatcgac ggggtgaccg acgggaacgg 360
 cacgtacacg atcgagctca aggacagcca cgaggaggac atctgcgnag tggctcttgg 420
 ggagagcccc cgcagngact g 441

<210> 1019
 <211> 483
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-063-Q1-E1-E4

<400> 1019

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 cncacgctcc gtctttatct gtaatctgaa gttacagga acatttgagt ggatcatgga 120
 cggattggta ggcctcttga aagtcggggg ggtgaggggc atcaaccttg cctaccgcga 180
 cgcaagaagc agcgatccgt atgtcgtcct acgacttggc aagaagaaac ttaagacgag 240
 cgtgaagaag agatctgtga accccatctg gcacgaggag ctaactctga ccgtcacaga 300
 tcccagccta gctctgaagc tggaggtgtt cgacaaggac acgttcagca gggacgaccc 360
 gatgggggac gcggagatcg acgtggcgcc gctggtggaa gcggcgaaac cgagcccgga 420
 ggcgagcctg angaacggcg ccatcatcct gtcggtgcgg ccgagcgcca cgaactgcct 480

<210> 1020
 <211> 362
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-063-Q1-E1-E5

 <400> 1020

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ggcgtcatcg acatcagcta cgggagcccc ggcggtaacc tatcactatg acacctcatg  120
cattccacaa gtctcagttg gactagattt tgtgcgttaa ccatgtttgt accgcaatta  180
tgagtactgc taatgactaa cacaacatca tgcggactaa ggcctgttgt aggtaaagca  240
gcagctgtga cagatctcat gacaaatggg cgatgcagga tatgtgctga ctgtcgtgca  300
cctgatccga agtggagcat ctactaatat tggagtgttg ctctgcttaa tatgtgcaga  360
tg                                                                 362
  
```

<210> 1021
 <211> 555
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-063-Q1-E1-E6

 <400> 1021

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cggaatcacg gcccgaccac gcgtcgggtcc tcctactcgg gctacaacga cgagctgctg   60
tgggccgcga cctggctgta cctggcgacg aggcggcagg tgtacgcgga cttcatcgcc  120
cacgaggcca tctcgtcgag cgtggccgag ttcagctggg acctcaagtt cccgggcgcg  180
caggtgctgc tggccgagtt caacatgacc tcggcgggcg gcgcgcagaa cttcaagtcg  240
caggcggaca acttcgtgtg cgcggtgctg ccggacacgg cgttccacca ggtgttcac  300
accccgggcg gcgtgatcca cctccgcgac ggcgccaact cgcagtacgt gaccagcacg  360
gcgttcctgc tgggtggtgta cgcggacctg ctgctgccga cggggcagac ggtgctgtgc  420
gggaaacagc cgctgccccg ggccgggtgc acgagttcgc gcggcagcag atggactacc  480
tgctggggcg ccaaccgcg gcacagctcc tacgtcttgg gcttcggcgc caaccgccc  540
  
```

aagcagccgc acaac

555

<210> 1022

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-E7

<400> 1022

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ttcatcggcc acgaggccat ctcgctcgagc gtggccgact tcagctggga cctcaagtgc 120
ccgggcgcac aggtgctgct ggccgagttc atcatgacct cggtctgcgg cgcgcagaac 180
ttcaagtcgc aggcgggacaa cttcgtgtgc gcggtgctgc cggacacggc gttccaccag 240
gtgttcatca ccccgggcgg cgtgatccac ctccgcgacg gcgccaactc gcagtatgtg 300
accagcaccg cgttctctgt ggtggtgtac gcggacctgc tggctctgac ggggcagacg 360
gtgctgtgcg ggaaccagcc gttgcccccg gcctggttgc agcagttccc gcgg 414

<210> 1023

<211> 500

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-063-Q1-E1-E8

<400> 1023

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agaggagggg caggaggagg ccgcaccaaa tctatctggg gatcggagcg cgggcgacaa 120
gatgccacgc ggcggcaagc ccgcggcttc gtcgaagccg aacccgttcg actcggactc 180
ggactcggag tccagcaata agccggcgaa caagtccggg gcgtcgtcgt accaggcccc 240
cgccgacgcc aagaagcggc acaaggacgg gttccgggac tcgggcgggc tggagaacca 300
gtcgggtgag gagctggagc actacgcggc gtacaaggcc gaggagacga cggacgcgct 360
cgccggctgc ctgcgcatcg ccgaggacat caggcangac gccagcgaca cgctgatcac 420
gctgcacaag caggggggagc agatagccgg acgcacgaga aggccgtcga gatcgacagg 480

nactcgcaag agcgagacct

500

<210> 1024

<211> 478

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D5

<400> 1024

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cgacgatggc ccggccgcgc ctctctctca ctttctgtct cgccgcggcg gccgtgctga 120

ccacggtgcc cggcgctcgc ctgcaccaagt cgaagctcgc caagaagagc gacgacgtcg 180

tgaacggggc cctctgacc gagaagatcc aggcgaagaa gacgctgata gtggggccgg 240

acgaggagtt caagaccgtg cagtccgcca tcgacgcggt gcccgcggcg aacgccgagt 300

gggtcatcgt ccacctccgc tctggcctgc acaggggcaa agttgtgata ccggagaaca 360

agcccttcat ctctgtgagg ggcaacggca aaggccggac ctccatctcc cacgagtccg 420

cctcttccga caacgccgag tccgccgctg tcaacgtgaa ctccggacaac gtcacgtg 478

<210> 1025

<211> 360

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-063-Q1-E1-C2

<400> 1025

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ccgtctttat ttgtaatctg aagcttacan gaacatttga gtggatcatg gacggattgg 120

taggcctctt gaaagtccgg gtggtgaggg gcatcaacct tgcctaccgc gacgcaagag 180

gcagcgatcc gtatgtcgtc ctacgacttg gcaagaagaa acttaagacg agcgtgaaga 240

agagatctgt gaaccccatc tggcacgaag agctaactct gaccgtcaca gatcccagcc 300

tagctctgaa gctggaggtg ttcgacaagg acacgttcag caagggacga ccgatggggg 360

<210> 1026

<211> 373

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-063-Q1-E1-C4

<400> 1026

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tttctcctcc tcaactttct ccttttcttg ccacggcaaa acaccttcgc cggcgagagc   60
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gtgtcgctct tctcccgga ctcgcatctac gccgtggctt ccatctccgg attcgacctc  180
cgcattccctt cccacagcac ccaagcagac cacagcaacg gctgcaacct ctgctggaac  240
gccgtggtag acttencat cccggctgcc gctgacacct gcggcctcgc actccacgtg  300
aggctccgag cccagcgtct atacctgngc gatcgcgaca tcggcgaagt gttttgtgcc  360
atcgacgaac tcc                                                         373
  
```

<210> 1027
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-063-Q1-E1-C5

<400> 1027

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accacgcgtc ggcaagatca ctacgagaat atcaagatgg aggactcagc caaccccatc   60
ttcatcgaca tgaagtactg ccccaacaag ttgtgtactg ccaacggcgc ctccaaggtc  120
accgtcaagg atgtcacctt caagaacatc accggcacct cctccacccc ggaggccgtt  180
agcctgctct gcaactgcaa ggtcccatgc accggcgtca ccatggatga cgtcaacgtc  240
gagtatagcg gcaccaaaa caagaccatg gctatatgca cgaacgcaa ggcagcacc  300
aagggttgcc tcaaggagct tgcattgttc tnagacctcc atcgactgac ccatctctct  360
agttataatt tttctctcgt ccttgcatgtg ccattagat gctatccatt ggtaacgcac  420
aacagtaaaa cgacaga                                                         437
  
```

<210> 1028
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-C6

<400> 1028

ggaatcatgg aacgaccacg cgtcgggcag gggaaggagg agaaacagac caccagatcg 60
atcgagacct cgccgtcgtc cggcaggggtt aatttggttc ttctccggcc ggggtgtgcat 120
ggcaaaacga cccacggtgc ccaagttcgg cacctgggac agcggcgatg ccgggtacac 180
ggcctacttc gacaaggtgc gcgagaacaa gggcgccacg gcgccgcccgc tgcgccggcc 240
gcgagcccc aacgacccccg accccgaccg cgagcccag cagaggagg ggccaatgaa 300
gagagtcccc ccgcccgtcgt cgtccaagcc ggcgaacgcc ggagccaccg cgagccgccg 360
ccgccggagc ggccccacgg gc 382

<210> 1029

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-C8

<400> 1029

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agccttggtc ctccctggtcc tcttctgcat cgtgcatggt gagaaggaag agtcaaaggg 120
catcgatgcg aaagcggtccg ggcctgggtgg gtccttcgac atcaccaagt tgggcgcctc 180
cggcaatggc aagacagaca gcacgaaggc tgtgcaggag gcatgggcat cggcgtgcgg 240
cggcactggg aagcagacaa tcctcatacc caagggcgac ttccttgctg gacaactcaa 300
cttcacaggc ccttgcaagg gcgacgtgac catccaagtg gatggcaatc tgctggcgag 360
cacggaccta agccagtaca aggaacatgg taattggatc gagattctac gcgtggataa 420
cctgggtcatc accggc 436

<210> 1030

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D1

<400> 1030

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ctccagctcg tcgagcgacg aggaagagga ggcgatcgat gagaacggcg agattatcaa 120
gaggaagaag aagaagatgg gcctcaagga gaagctcaag gagaagctgc cgggccacaa 180
ggacggccac cacacggccg caccgtctcc ggcgcccgcg cccgtggaga cgcagtccca 240
ccaccaggag gaagcgcaca ggccgcacgt cgtcccgcacc ccggccccgc cgcctccacc 300
gcacgtccac cagcaccgacc acggcgctcgt cgtccaggac gacgtgaaga ccgggaaccc 360
gccgcatgca cccggagg 378

<210> 1031

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-D3

<400> 1031

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aggtggccgt caacgacgtc gtcttcatga acatccacgg cacctccaac acgccggagg 120
ccatcacgct caactgcgcc aacagactgc catgccaggg cgtgcagctc gtcaacgtcg 180
acatcaagta caatggatcc ggcaacaata ccatggccgt ctgcaagaat gccatcggca 240
agtccatcgg cttggcaaag gacctggcgt gcatttgaac caattgacta acatgcatat 300
attatgtact aggtttgtgc ccgtgcgttg acacggaagt taaaaattac tataacacag 360
agatacatag cgataagtat cactatgaca ttcacaatcc atgtggcaca atatcactgt 420
aaccatctat gattgtgcat tgcga 445

<210> 1032

<211> 458

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-063-Q1-E1-D4

<400> 1032

aggttgaaat aattatgtat gcaaggcatg ctatccgcac cgccttctgt ctgtacaaaa 60

ttcttgagta caaagaacgt gatatacaca ctaccggttg cgctcatcct gtactcaacc 120
 cactagcctg gcaccatcag tcttcatggt tgcaagtgtc ctcaaggaga atagagaaaa 180
 tctgttacia gaagccagag gactggatga tcttatcagg atattgaacg atgtaaatgg 240
 gaacttagat gctaagaaag cttgcgctgg agcattgaaa cttcacaaaa aatacctgaa 300
 aaacgtacia gcanagaaac cttaaactg ccatggaaca cacgtcccca atggggctat 360
 cgttcacatt tcaacataca cgaccatttt ctacacacaa ctttgagtga cgatttatcg 420
 gacacaggtg gtaatcgtct gacatgtcct gagataca 458

<210> 1033
 <211> 464
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-063-Q1-E1-A8

<400> 1033
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 ctgtgcaggg cgcgagcgcg ttcgttcggc atggaacaga acgccggctc gttcctcgcc 120
 gtgcgtcgcc tctccggtgg cgccatccac caccatcgtc accactcttc cccggctgag 180
 gtcgtgggag tgtccactgc gtggctcggt aaggggcttt catgcgtctg cgcgagagg 240
 agggagagcg acgtgcgcct gtccttcgat ttgagtccca ttcaggaaga gtgcttgaat 300
 aggttgcaga accggataga ggtgcagtat gatggttcaa atctggagca tcagaaagca 360
 ctggaagccc tttggcgctc ctcttttctt ggaactgaac ttctaggggt agtatcagac 420
 cagtggaagg agatgggatg gcaagggaag agatcatcta caga 464

<210> 1034
 <211> 356
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-063-Q1-E1-B1

<400> 1034
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 gtcgcaccgg tggctctcgt cgtcgagagg ccacgagcac ggcgagacgc cgcggttgga 120

caacttccgc tcgccgttcg cgcgcggggg ccccgcaac acgcgcaagt cgtacgccga 180
cctcagccac atgtccatgc cggactcggc cgacatctcg tttgtcagca gcaccggccg 240
ccggagcgtc gaccaccacc cggcgatccc gccgcggatg tccaacggct ccgtggacag 300
ctacgaccac agcttcgaga tgtcacgcac gccagcaag tggggcggcg actcct 356

<210> 1035
<211> 319
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-B2

<400> 1035

gtcggccac gcctccgggg agacacgcaa ccgccgatgg cgaagaagca cagggaccca 60
gcctctgagg ccgcgagcgg cgactccccg gccgcgtcca tccgctccct cttctccgcy 120
gacaaccgt tccgccggaa ggctctacg gaggagcccc ccgcgactcc tgcaccgcc 180
acgacgcccc tccccatgca acccagccgt gacgccaggg atgccgagcc gtcctcgaag 240
aagaataaga agagcaagga ggatggcccc cggcgcaagc ggaagcggga cgagttggag 300
gccggccggg agcggcggc 319

<210> 1036
<211> 432
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-063-Q1-E1-B3

<400> 1036

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ccacagctgc ggtcctcttc tacatcctcg ccgtcgtgc cctcagcgcg gccgaggcac 120
cggcagagtc accgaaggca ggcagtctg ccaaggcacc ggccgagtca ccgaaggcag 180
gcagtcctgc agctcctgcc aaggcaccg agtctgctgc cacgagaact gccccgcta 240
aggcacctca agccgcctcc acccccgcg ctgccgctgc cccatcgtcg tcgtcgtcta 300
ggaagtctgg tccagctgcc gcgccgacca ccgccgcctc tacaccgtct tcttcacgcy 360

acgaggagtt gagcccttcg ccgtcggcat ccaccgccga ggtggcgctc cctgccgctg 420
atgggcctgc tg 432

<210> 1037
<211> 294
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-063-Q1-E1-B4

<400> 1037

cgtcggaccg angtcactat ggtcaaacat tagagtccg cagtatcagc ttcacgaggg 60
aaatcataat gcggcacacg tcgttccggt caagaancat ttgaatagtg tcaggaccct 120
gttgccatgc tttgcgaaac tgaagctgtt catgcgcatt gtggatttcg agccatctgg 180
gtggcgccat catgcataag acatcgaatt gcctcacaac taatggacgt tgcaaagagt 240
accttctgca tatgcaagac tttggggatt tcacaatctg ctttcgctcg tccg 294

<210> 1038
<211> 182
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-B5

<400> 1038

cggcgccacg gcctctcctg ctatcgctgc tggtcgccgt gctagcgggt gccgcggatg 60
tcgccaacgc cggccacgcc aagccccctga cgcttgccgg gcgcgtggta caccacaacc 120
acggcaagtt cacggccggg ccgtggaaac ccgcccaacg cgacttctac ggcgggcggg 180
ac 182

<210> 1039
<211> 403
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-063-Q1-E1-B6

<400> 1039

cggaattacg gaacgaccac gcgtcgcgcg ctccgaaggg gaagctctga taacatcacc 60
 gttgtcatcg tccgcttcct atatggaact accggtgata aatcaggcgc agacaaagag 120
 accaccaatg accaaaaactc ctaattgcct cctgtaggga tccatcatgc gtgtgttttc 180
 ttctgggtgt tgtatctgat gctcaaagta gatgctccgt gtgtcttcg caaggaaact 240
 gattcccccg accgtcgteg tgatgctgcc cgctcatgct cgtagacggg aatgcctgcc 300
 gcagaatgac gaatanggct ggtgtgtgtt atactatgag ggcctcctc gnnccccca 360
 cccgcngcgt ggacagcccc agcgggtgca agcccagcgc ggc 403

<210> 1040

<211> 475

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-B7

<400> 1040

cggattatcg gcacgaccac gcgtgcgccc acgcgtccgg aaacaagcac atagaaacaa 60
 atacatcgct agctcgccac caacaatggc ctcaaggtag tctatcctgc ttgccacaac 120
 gacactggct atgttggtcg cattcggttc gtgcaccacc ccactcacct tccaggtcgg 180
 caagggtccc aagcctggcc acctggttct caccctaac attgccacca tctctgacgt 240
 ggagatcaag gagcatggcg gcgacgattt ctctttaca ctcaaggagg gccagctgg 300
 cacttgacg ctgcacacca aggccccgct caagtacccc ctctgcatcc gctttgctac 360
 caagtctggc ggctaccgta tcgccgatga tgtcatcccc gccgatttca aggccggcac 420
 cacctacaag accactctca gcactctgat agcctgtgat gagtgtgac gaata 475

<210> 1041

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-B8

<400> 1041

ggaatcacgg aacgaccacg cgtcgggcag cgcgaggatc atccaacca ccatgtaa 60
 gtcgaaggtc cactgtacat atgccttct cttaccggcg aagttatagg cagccggaat 120

aaggagagct ggctgttgga tcgaagccta caggattcca acgttcggat cggcgccccg 180
 tccaaattgc aggcatttct ttgccgttcc ctcttctttc ttcaaacgag aacacgcacc 240
 cattgctggt acagaacatg acataaaaaga ttcagtaaca tgatttgacc gtgtggcatt 300
 gtggcgccctg caaggccgtg taaaaaaaaa agtaccacct atgcaaacgc tttgctacca 360
 aatctggcgg ctaccg 376

<210> 1042
 <211> 539
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-063-Q1-E1-C1

<400> 1042

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 gtcaacgccg ccggtttcgt cgtcncgccg cgcgctcgtc cggccccgtt cgcgcgctgc 120
 ctcaccatcg tcttcgagcg cttcaccggc ggctcggcgg ccgcgcttcgc cgcgccgcgc 180
 ctctacgcgc tggccgcgcc cgtggccggc tttttcgcgt acgacgcggc ggcgggggccc 240
 gacgcccggg tctcgctccg ggcgctcggc gcgccggtgc gcgtcgagtt cgatgacgag 300
 ctgtcggcgg cggctctgga caaggggttc gacgcggccg ccgcgctgtg cgtgacgttc 360
 gcggccagcg ggggaggtcg tggccacgta cgccgtcacg tcgggctccg cgtcnacgtg 420
 cgcggtcacc ggcacgggcc acttcggtat aggtgtgcgg ctgcccgaga cgccgccgcc 480
 agcctcagcc gggttggtgg gccgtgacgg tgggtgtcgg cgccggtggg gtgctggga 539

<210> 1043
 <211> 241
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-E7

<400> 1043

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 ctacctccgg gtctgaatcc ggtgccgcct cgactaacga gagcgctgcg tcagaagagg 120

cccctacaag tgcgcccgan gacgcatcat cgggcagccc ttccacgtcg ccgtcagatg 180
 ccgatgctgc agtatcgccc gatagtagca gcggtggtgg taccgcctcg aaagagcctt 240
 c 241

<210> 1044
 <211> 221
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-E8

<400> 1044

ctgcgggaac actgtacaag agcgggaagc cggcgctgcc gtggcggcag cgcctcgaga 60
 tcaccatcgg cgccgcgcgg cgctgcact acctccacac cgccgccatc tacacgagca 120
 tccgnctcga cgtgtccgcg accacgatcc tgggtggacga caactgggta gccagggttt 180
 ccgacttcgg cttgtccaag accggcccga cggccatgaa c 221

<210> 1045
 <211> 101
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-062-Q1-E1-F1

<400> 1045

tcatagctaa gcaggtctga caggatgtcg tggcagacat acgtcgatga gcacctcatg 60
 tgcgagatcg agggccacca cctgacctcc gctgccatag t 101

<210> 1046
 <211> 122
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-F3

<400> 1046

tcggcgcctg gctcnnngt ggcacctccg acaccgtacg tcctccatcg cgtcgccgcc 60
 ggccggcctc tgtccagccc gggctgcctg cgagggcttc tgatggccct cgacgccgtc 120

ct

122

<210> 1047
<211> 256
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-062-Q1-E1-F4

<400> 1047

tcgctcccag tcccacctaa ccgaggcaaa accggccctt cgcacttccg cagaacgagc 60
actcgtgaac caaatatttg gcacaagtta gctttgcctg tttcttgctg gtacatccct 120
caaggtttct ccgccacacg cgcttcgggt tcgcgggagc ttgccagatg aatgggtcaaa 180
ccccgatggg gctcgccgca gtagcattga ggccgtgctg caaccgcctc atctcgtccg 240
cctcggccgc cgcggc 256

<210> 1048
<211> 243
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-062-Q1-E1-F5

<400> 1048

ccacgcgtcg gccccattcg tttagctgaa acacaagaat aaacgcagcc gggcatgggc 60
gaagctaagc tcaacaacgt gaccgtcctg ctggtggccc tctcctcct gagcagtggc 120
gttcaggacg ctgccgccat gccaggcacg tggaactacg acgcgattgt cgccgacgag 180
ccaaacggaa agaacaagga cctgtaccgc cccgtcgcca acgccaataa atacacccgc 240
ggg 243

<210> 1049
<211> 253
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-062-Q1-E1-F7

<400> 1049

ccgggatgac cagcgcgtcg gccgaagatc acagaaggga cttccggttc cgtgctagcg 60

tctagcgatc gcgtcggcct ccactccacc ttcgcgaaaa agcttaccct ttgtgtttgt 120
 gtgtctgtct ggcaatcgat cgatggccat gagcgaggtc ggcgccgcgc gcacgcctgc 180
 tcgccatggc gctggcgctc gcctgctgctc tgctcgtcag gtccgcggac gccgccacgc 240
 ccggcggctc cgc 253

<210> 1050
 <211> 118
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-062-Q1-E1-G1
 <400> 1050

tcgccacgcg tccggccgcc gcaagaagag cagccgcagc tggagcccc gtgtcggcct 60
 tcatggagat gacgacggat gaggaacggc ggaggggcga cgcgggggtgc tgctgctg 118

<210> 1051
 <211> 241
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-G6
 <400> 1051

accacgcgtc ggccccacgcg tcagcgcacg cgtccgttcg ccttcgcctt tgtcttcncg 60
 ctncgctgc gaaatccgcc cgccgattaa gcttgcttgc cctagcagat cgaagcccga 120
 gccctagccc tagccgagga gcgcgcgcga tgggcgtcgc ggtcgtgggc tgaggggccg 180
 cggctctttg catggcgtga ggaagcggcg tcccgaggcg cgggaatgga ccctagcctg 240
 a 241

<210> 1052
 <211> 354
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-G8
 <400> 1052

ccacgcgtcg gcccgacctg ttccagccag acaactggcg ccgcttcgcc gcgttcgtca 60
agcgcatgac ggagccgggc gcgcgggagg cgtgccggga gcaggtggag cgggaggccg 120
anggcgtcgc gcacgccacc cagccccctca tgcacgacgc cgccgtcgcg ctcnacaact 180
gaccggaccg gccggcgttc cccgtcgact gtgttcgata gctagacggg gtggcacgct 240
gcgatgacga cctgtatggc gagtccttat acttactcat acataagctg cgccgccgtg 300
tcgtcngtgc gtgcaccgcg cagtactgtg cgtacagcgg aagctgcgac tgcg 354

<210> 1053
<211> 134
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-062-Q1-E1-H5

<400> 1053

acgcgtcggc cacgcgtccg cgagaacgag tacagcatat ggaagcggcg ttcaaagatg 60
agggcgacaa gtacatcaac tgggcagcga agatggccat ctccaccaac atcggcatac 120
cgtggatcat gtgc 134

<210> 1054
<211> 448
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-062-Q1-E1-H6

<400> 1054

gacgacatgg cccgcacatcg cgccggcgcc gtgttggcgc tcctagtggc ggtcgcggcg 60
gtggcccgct tcctcgcggt gccggcctcg gcgaagtccg gggagctgag cgcgatgggg 120
ttgctggcgg cgaagggcgg cagcggcgcg ggcccgcaga agtgctcggg cgcggtgggc 180
gagtgcgacg tggacgaagc ggaggagctc gggctgagcg gcggcggcct cggctccgac 240
gacgcggtgc ggcggacgct ggcgcagcgg aagccgagca accggtacat cagctacgcg 300
gcgctgcgcg cggacgaagt gccgtgcaac aagcgcggcc ggtcctacta cagcaactgc 360
gaggcncaga aggccgccaa cccctacgcg cgcggtgct cgccatcacg cgctgcgccc 420
gcaacatgaa ctgagcccag cgctagct 448

<210> 1055
 <211> 254
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-H7

 <400> 1055

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 cgtcacgggc ctcacctggc tctcctggtt cnccttcac ctcttcgaca ccgactggat 120
 gggccgcgag atgtagcacg gcaggcccga cggcagcccc gangacgtgg ccaggttcca 180
 gganggcgtc cggcangggc ccttcngcct gctcctcaac tccgtcgtcc tcggagccag 240
 ctcttctctc atcg 254

 <210> 1056
 <211> 95
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-062-Q1-E1-H8

 <400> 1056

 ggccctgccgg tgagcgacga gtgcaaggtg aagttccggg atctgaaggc gcggcggagc 60
 ttccggttca tcgtgttcag gatcgacgac aagga 95

 <210> 1057
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-063-Q1-E1-A1

 <400> 1057

 ggaattccgg gacgaccacg cgtgcgccat tacagcaatg gcggacaagg tgttcctcct 60
 cctccgactc agcatggtcg ccgtcgtcct ggctgccatc gccacagtag tgctcgcgga 120
 ggaagccgat ccgcgggcac tgccggcaca gtggaccacc gcgaagaagt acaaggccac 180
 gatggacgcc aagacgcggc aggctttcga cggcgtgggtg gccgccgcta cggcagagaa 240

gcggtcccag gcggtggagg ccgtgctgca gcagcagctg aacatggacg tgtccctgtc 300
 caaggcgacg tcttcggggg acgagaacaa ctacgtgagc gtggccgccg cctacgagaa 360
 ggccgcgggc gccgtcatcg cggcgacgcc ggacaacaag ctccgcgcta t 411

<210> 1058
 <211> 247
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-A3

<400> 1058

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 ccacatcggg ggcgaccaca aggaggagca cgagcacaag aagggcgagg agcaccacaa 120
 gaagggcgag gagcaccaca agaaggacga cggggagcac aaggagggca tcgtggagaa 180
 gatcaaggac aagatcaccg gccagcacgg cgacaagtcc ggcgaccaca aggacaaaga 240
 ccataag 247

<210> 1059
 <211> 260
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-E6

<400> 1059

accaccgtcg acacatccgc atgaaggacg tcaagtgcgg ccgggccacg catcagctcg 60
 gcccctgnng cggtacaagg acgagaagga cgtggaggac gtgaagggtga cggggtgcac 120
 gctcgccggc accacgaagg gccggcgcat caagtcgtac gaggactcca agtcgtcgct 180
 cagggccagc aagttcctgt accaggacgt caccatggac aacgtctcct aacctatcat 240
 cagtagacag aagtactgcc 260

<210> 1060
 <211> 407
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-063-Q1-E1-A4

<400> 1060

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ccggattgtc ataactccag ctggcccac aggcccatct tctcctcagt ctgaagctgg 120
ggagtccaat gtgtttcacc aggaaaaaga tgctgcagca gatggggcac cgctgacac 180
tgatggagca gtggctgagg ccggagagga agaaacaacg gaaaatgttg gtgaagcgac 240
atthagctat gaccgcttga tatccaaatc caccgatcca gttcgtggga tagattacaa 300
acgcagagag gcatacttat cagatagtga attccaaact gtntttggca tgacaaagga 360
tgcattctac cgacagccaa attggaacca ggaactacag aaccaa 407

<210> 1061

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-A5

<400> 1061

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ggtgagaggc gcatggtgcg gtcctcccaa agtcccccca ggcaagaaca tcacggccac 120
ctatggcaag gactggctgg acgctaaagc gacatggtat ggcaagccga cgggtgccgg 180
tcccgcagat aacggtggcg gctgcgggta caaggacgtg aacaagcccc cttcaatag 240
catgggcgca tgcggcaaca tccccatctt caaggatggt ctgggttgtg ggtcctgctt 300
cgagatcaag tgcgataagc ctgtggagtg ctccggcaag cccgtggtgg tgcacatcac 360
ggacatgaac tatg 374

<210> 1062

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-063-Q1-E1-A6

<400> 1062

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gtcgatcatc cagcaccagc atgagaatcc cgtcgaatcc ccctctcaac caagggcgcg 120
cgcgcggtgcg tatgcctcct ccagatccaa agcaacagac agcgaggggg caccgggggtc 180
cgccgcatgt ttgcgattta tggaggatca tgctttcttg cttactacat tagctcctga 240
cgcgccgccc tccccctcgcg ttcattgatt tctgttataa ttactaccga gctactatct 300
ccacattatt attggtaaag aaagaaaggg cgctcctct aacttgatgg gcaatccgtt 360
tccatctcaa cttcaacgcc aacaacagtt gatgctacta tggttggaaa tcgggcatgg 420
tt 422

<210> 1063
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H6

<400> 1063

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gggtgtcgtc cttgcagcgc tcgtcgccgg cgggtcatgc gggccccga aggtgccgcc 120
cgggtccaac atcaccacca actacaacgg caagtggctc accgccaggg ccacctggta 180
cggtcagccc aacggtgccg gcgctcctga caacggcggt gcgtgcggga tcaagaacgt 240
gaacctgcca ccctacagcg gcatgacggc gtgcggcaac gtccccatct tcaaggacgg 300
caagggctgc ggctcatgct acgaggtgag atgcaaggaa aaacctgagt gctcgggcaa 360
tccagtcacg gtgtacatca ctgacatgaa ctacgagcct atcgctccct accacttcga 420
ct 422

<210> 1064
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H8

<400> 1064

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gaggttgcaa ctaattgctc gttagagctg gactgcgtga ggccatctag tgccccaaaa 120

gcttcaggtt tatcaaattgg aggggggcaca gctgtaaaaa agatccaagt caaggggttca 180
aaaggttcag acgttagggg agtgaatcct ggaaaaaggt catcgccatt acagaagaag 240
ccgagtggac cctcaccgac gctaataaag aagggcgag gtgaaggaag gaagactcca 300
aatggtaaaa caggaaccaa gaagtaagca acccagatga aacttggttt tgctgtgacc 360
aacttcacct tggttaggga cagataaaca tgttgatact accgggtgat acattgat 418

<210> 1065
<211> 371
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-062-Q1-E1-A1

<400> 1065

acgcgtcggc ccacgcgtcc gccacgcat cggccagatg ctgtcgaagc tgcggcaccg 60
gcacctggtg tccctgatcg gctactgca cgagaacgag gagatgatcc tgggtgtacga 120
gtacatgcac aacggcgtgt tccngaacga ggtcgacggc agcgagggga aggcgccgct 180
gccgtggaag cagcggctgg agatctgcat cggcgtgcc cgggggctgc actacctgca 240
cacgggcacg gcgcaaggga tcatccacgg cgacgtgaag acgaccaaca tcctgcggga 300
ggagaacttc gtggccaagg tgtccgactt cgggctgtcc aaagacgggc ccgggatgaa 360
ccagctgcac g 371

<210> 1066
<211> 340
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-062-Q1-E1-A3

<400> 1066

attgatgatc ttggtgctcc gatcatgaga agcacagtgg ggtgtagtcg attggcccca 60
gttcgcgaag agatgcagat gagagcagga gactctgcag cttattgcan ctgcggctat 120
gactttgtgg tgggtggacaa aacagttgac tatggtcgag gaggatcacc gtcagataaa 180
agcagtgctt cagaagtaag aactcatgtt cggccactgg atgctagcac agcagccccc 240

gtggcaggtc cctcaagtaa gaggcgagct acanttgtgc ctgaagaggt ttcngatgaa 300
cgagtgttcc gtcgctttgt cagactactt ctggccttca 340

<210> 1067
<211> 342
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-062-Q1-E1-A6

<400> 1067

accacgcgtc gcgcgcgacg cgtgggcgag ccacaccgac gcgacgattc ctctcctccg 60
cccgttccca ccgatctcac gctctctctc ttctctccgtc gcgtcggcgt cgccatcgcc 120
ggccatgggt tgcggtgggt ccaaaggagg cgtgngcacc ggcaacacca gcgccggcag 180
caaggtcctc cggaggaagt cctcctccgt ctccaccggc gcaagccaca cctccaccac 240
gtcgccgtca gcctccggcg tcgtcgtcaa ggacgtcgtg aaggatgcng cggcggccgg 300
cgaagtgatg acgcccggcg acgccgagaa gcctatctct gt 342

<210> 1068
<211> 71
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-062-Q1-E1-B1

<400> 1068

gcgatgccc catggccgcc atggctcgtt ccgtctccct cgtcgtggcg cccctgctcc 60
tcctctccct c 71

<210> 1069
<211> 229
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-062-Q1-E1-B3

<400> 1069

agatgctgct ggagcaagcg acacatcctg tcgggcgcca cgtccgtggt cggcgcgggcg 60

ccggtggagg tctccgtgaa ngaggccggc atccactggc actacggcag ccggtcgcac 120
 gcccccgagc tcaccgcggg ctagtacaac aggcggcgcc acgacgggta cctcacgac 180
 gcgcgcgtcc tgtcgcgccca cggcgccgtg ctcaacttca cctgcgtgg 229

<210> 1070
 <211> 87
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-B6

<400> 1070

accacgcgtc ggcccacgcg tcngacgacg tatcttcac 60
 atatgtcgca tactaaatat tctgtct 87

<210> 1071
 <211> 356
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-B7

<400> 1071

cgctccatc gcatcccgcg gccgcccgtc cgacggtcgc taataagccg ccgcatccac 60
 ggatggagat gaagaagatc gcttgcggcg tcttcgtcgc cgccgcggcc acgcgtggcg 120
 ctggccgcgg agggccgggt ccgtctcgca ccagcggctc ctccgcggtc gcagccgcc 180
 tcttcggggc cgccgtggcc tccttcttcg cgtacgacat tcttgagcc gccggacgac 240
 gagccgcagc ctgacgtagg agaccagngt gnggggagag acgtggctgc gctgcacggc 300
 tctgctgctc tcgcgcattc ccgacgcctg ggcgtgctct gattgggcac ggcggt 356

<210> 1072
 <211> 356
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-C3

<400> 1072

atggacgata cataagagaa gcacgccgac ctcgatcaag agtgaggaga gcgaggagcc 60
gaagctactg acctacgagc aagaagctcc agaggaaccc gaaaatgctg tggaagagga 120
gaaagaagaa ctgagtcgaa gagcagaacc tcagcctgtg cctgatccag aacccccaccc 180
acagcanacg actggagatc tactaaacct ggaagcagag gtgaatcctt cggtctctgga 240
actcgaacaa agcaatgcat tggcactcac tattgtagca tcatgtgact acaagccgcc 300
agcatctcaa agtatgtctg atgtcaattc ctctgggtgg gagctggcac tgggtca 356

<210> 1073
<211> 237
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-062-Q1-E1-C5

<400> 1073
gcgagggcct gctgccaggg tgtctggcgc caggcgactc tgccgtcgct cccggcgctc 60
atcttgggtgc cgccggccac caccatctcc acgcaccaca cctccggcgc cgtctagcag 120
cncaggacgc cgccggcgat ctccggcgccg ccgtggacca cgcccaccat tcccgtcctg 180
caggctctct gccctgctt ggtcgtcgac gacgacgacc tcgtcctcat cagcacc 237

<210> 1074
<211> 211
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-062-Q1-E1-C6

<400> 1074
cgtcgctgct agtgccctgcc gttgaactct ccggccacca ttgatccgac ctgcctaag 60
ccatctatga gtagagaaaa acagtgaacg ccacctctgt actcgccccg acgtatggcg 120
cgtcgctcct gcagtaccgg cccacgctct gcgcggtgct caagtgttac ggctgccctc 180
aaatccgtcg tcggaccatt ggcaactgggg c 211

<210> 1075
<211> 379
<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-062-Q1-E1-C7

<400> 1075

gcgtccgagg cgggtgcagcc gcgactgggc gcgcgaccgc aagcgccctgg ccaggtgcgc 60

catgggcttc ggccacagga ccaccggcgg gctggccggc aagtgcgacg tggtcattga 120

cgccancgac gacgccgcgg acctcgtcac cccaggaag ggcacgctcc ggcacgccgt 180

gacccggggc cgggcgctgt ggatcacctt cgcgcgcgac atggtgatcg agctcggcca 240

ggagctcatc gtgagcagcc acaggagcat cgacggccgc tgagcgcatg tgcacatcgt 300

gggcgcgcag atcacgtgc agaacgtgcg caacgtgatc ctccacaacc tgcacgtcga 360

cgacgccgcg gcgcacggc 379

<210> 1076

<211> 271

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-062-Q1-E1-C8

<400> 1076

accacgcgtc ggctcacct cncncntca cacagataat aaggaaaggt cgcgcccttt 60

tcctccgaca tccacaaggg gggaggggaa aacacgtaca ttcacccggc ggcaataatg 120

gcctcggttc cggctccggc gacgaggacc gcggccgtca tcctatgcct atgcgtcgtc 180

ctctcctgtg ccgcgggtga cgacncgaac ctncggact acgtcatcca aggccgcgtg 240

tactgcgaca cctgccgcgc cgggttcgtg a 271

<210> 1077

<211> 330

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-062-Q1-E1-D1

<400> 1077

gtccgctcga caacgagaac cgacatcgct catggangcc cggactctga atcctcatct 60

caccttcacc tgtcgcactg tcagcgggag gttcatcttg caacattgca ttgcacagcg 120
 cgcacggcgc tcgnaacctt cagaagtgcg agcattgcgg agatatgggt gccacgaagc 180
 ttatggatga gcactacgat gagaaacatg ctccgatgaa ttgctcacgt tgcaaacaca 240
 cagtaggaac gcgagctatc ggatcttcat acaggcatac aatgccaca aaggatgctc 300
 gcgtgccagt actgtcagtt tgaactgcct 330

<210> 1078
 <211> 229
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-062-Q1-E1-D6

<400> 1078

gaccggagat ctagaggaac caagtgtact gcaacggcga gctggtgctg gtgacggggg 60
 gcaccaagcc ggagtacacg gtggacgtgt ggtccgaaa ccaccctac tatgtcggcg 120
 acacctcggc gtcagtggc atggacagcc agatcgagaa gttccgcaag aagtggggcc 180
 acatcaagga gtactggccc gaggaacagt ggaggagat gcaccaga 229

<210> 1079
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-062-Q1-E1-D7

<400> 1079

cgcgtcggcc cgcgctcag tcgagatata gatctcgaga agttgcagct cccacaatg 60
 gaaggctctgg ctaaaaaact aaaaaagaac tctgggagca agatcgagtc tgctagtgtt 120
 gcatgtcatc catcagaagc aggtactagt gactgccagc tggtttaact ccaagtcagg 180
 aaagaagatt cctttgaaat cagtcacttc aatcgtcgat gggctaaaga aatcgtacat 240
 tgagaagttg aggcccttgg aaaaaacgta tcagttccat gacttcgtct cgcgcttgct 300
 gactagcagc gatttcgatg cgaaaccaat ggtcatgctg ttgggtcaat actccacggg 360

<210> 1080
 <211> 303

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-062-Q1-E1-D8

 <400> 1080

 gcggggcacat ctagccgcaa gcattcttcc ttccttccca ttcacgcgtg accatggatt 60
 gaagacattg atcggcttct ctggagggtgc gtgtgncagc tcggagggtca nccgccgaga 120
 ctcataggca atggcaaccg caaggaagga tcctcagcag gttgagaaag tcaacctgaa 180
 naccaacgag tctggcaaag gggtagtacg gcgtgcaagg tctgtcnncg actctccgga 240
 tcgcagatcg tccccatccc cgggcccgagt ctgagacaac gcaggccgac ggcacatca 300
 gtc 303

<210> 1081
 <211> 448
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-061-Q1-E1-G3

 <400> 1081

 ctcacgggtc gacgcacgcc tctacaattg gtccctcaac gacgctaatac aagaagggcg 60
 gaggtgaagg aaggaagact ccaaattgta aaacaggaac caagaagtaa gcaatccaga 120
 tgaaacttgg ttttgctgtg accaacttca ccttggttag ggacagataa acatgttgat 180
 actatcgggt gatacattga tatttgccac acgaatacgt cagtcctctt aaggaggag 240
 gtcgctagat cttcgggcat ctgctgtaaa tcaactcgtt atttggtgta gtacgaacag 300
 aaaacggacc acaaaaaact cgaggatggg aggaagatca tcatcacaag gacgtttttg 360
 ttagatgtat atgttgctta gcttattttt ctcgctgtgt gtaagggtt ctatgccctg 420
 cccatgtaca tgtttggtt cctgcccc 448

<210> 1082
 <211> 453
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-061-Q1-E1-G4

<400> 1082

ctcacgggtc gatgcacgcg tctagcatgc caccctctt cgcttccgtt cctgtcctct 60
cctctgtccc tctacggtgc ttctgtctgc cggcccaaaa tcgcctcatc gaccacgccc 120
ccttccaggc tcccgtctcc atgggtctcc tctcaaacag gattgggagg gagagcctca 180
aggcggggga tcatatctac tcctggaggg cggcgtgggt ctacgcgcac cacggaatat 240
atgtggggcg tgataagggtg atccatttca caagaggaag aggacaggag gtcggaacag 300
gaactgtcgt cgatattatt cttgtgagtt ccaccccaaa acgaagcaac acgccttgcc 360
cgggtgtgcac cgacgaaacc agcgacagca gcacagagac gaacggcgtg gtatcctcct 420
gtctcagctg cttcctagct gggggtgctc tct 453

<210> 1083

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H10

<400> 1083

cacgcgtccg gaaggccggc atcgtgccca tctcctaccg cagggtggcg tgcgcgaagc 60
agggcggcat ccggtacacc atcaccggga acaagtactt caacatggtg acgatcacca 120
atgtggggcg cgccggcgac atcgcggcgg tgtcggtgaa ggggagcaag cgtgtcaagt 180
ggacggagat gaagcgcaac tgggggcaag tgtggcagac cggggaggac ctacactgcy 240
agtcgctgac gttccgggtg atgaccagcg accaccgcaa ggccaccta tggcacgttc 300
tccccgctga ctggaagtgc ggtgtcacgt accaggcatc caagaacttc taagtagcca 360
cttttctctc tcttcttcaa cctgcatatg cccacaagca accatgcaaa tgataacatg 420
caat 424

<210> 1084

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-H4

<400> 1084

gggacgactc agacgtgtac aagtgtctac acagctgctc ggacgacgtc gaggaggccg 60
 tcgcccacct caacggcctc gtccgggagc ccaccgacgc caagttcctg gagctcaagt 120
 cgtggctctc ctccacgtc ggcggcacct ccacctgcga ggacgcctgc aaggacctgc 180
 ccaagaacgg cgacaaggac gacgtcgtca acttcagcct cgacttcgag aagctgcagc 240
 gcgtcacgtt ggacctcatt accgaggcat ccggatccat gtccgcaggc atcgccctgc 300
 caccctccaa cgccggagcg cctcctacg gggcgggcgc gccgttcgga ggtgccgcgg 360
 acgcacccgc cggcacctcc gaggggcctg ccagcgccag cggggccatc 409

<210> 1085

<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C12

<400> 1085

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 tcctgggcag ccgggtgaag acagcgatgg agccgcggtc agagtcggag cagccgcggc 120
 gccgggaggt ggctcggagc aacgacgtga tcgaggcggc acgcaccaag ctgatgcaga 180
 agcgccagtg cagcagggtc aaggcgctcg tcggcgccct cgagactgtc atagacaccc 240
 agaaggacgc cgccgccggc aggccacaac acatctaccg caagtcagct taaaacatac 300
 tgcggcggcg gggacgcatt gatcctccac gcttcgtgtc ttgccttaa ttaattaatt 360
 aattgttatg atcatgtcgg ccagcccaac gccgtatgca tgcattgaca cggcgctaatt 420
 taatccctgt ttatttacta ctccgtgaaa tgt 453

<210> 1086

<211> 324

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C2

<400> 1086

actcacgggt cgacacacgc ctctagaggg actcacatta gagacaggat gtccaccgcg 60
 cagcgctgc acaccctccc gccgctgccg ctgcagaacg gcaccgccgg tgacgacgac 120

caacctgctc cccgccaacc cgctcggcta cctcaaggac gtgccgctgc ccatctgctc 360
ctcgtgctc aaacagttgg actcggacga cgacgacgat cagtaatagc acatcgacga 420
cgacgatcga tatg 434

<210> 1089
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B1

<400> 1089

ggtcgataca cgcgtctaca cagcgtctg ctcgtttctc attcagcgcc cgtacagcca 60
ccactctcaa ccgagccata tccaaagttc tcaacatcgc ttcgtgcagc ctgcatcggt 120
cgacgagggc tgcacgaacg atgggggtccg cctccgcctc agtgacgaca accagcctgc 180
tggcgctggc gctggcagcg ctggctttcg tctccagggc cgcggcgcag ggcaacggct 240
gttcacgctg gatgatgacc ctggccccgt gcatggactt catctccagc aaggcgtctg 300
agccgggggat ctctgctgc tcggtgctgg ccggagtcgt gcagaccgac ccccgctgcc 360
tctgcatggt actggacggc actgccacgt cttcggcat cgccatcaac cag 413

<210> 1090
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B12

<400> 1090

tcgcgggtcg atacaagact ctacatcgct tcgcagaatc tcgtcgtcgc cttggcgacg 60
tgtacaaaca agtctgttga tgcccgcgtg gtccaccca tcgtcaccct cgaggccgat 120
ggctcatctc ccacctctgg cgatggtcgt cgctgatca gctccaccaa ccaagatgaa 180
cttggagcgt tatgccaaca gatgcactac aagacgttgt gctccacgat gacgacactg 240
cctgggggtga ctacgccaga gcaactctta gatgcatccc tgcggattac agcggatgaag 300
gcagcgatgg cggagatgaa gctagacaat gcaataaaat caggcagtgc tcagggtaac 360
ccgatgatgt cgtcgctaaa gacatgcaag gagagctacg cgtcgctggt agactccatc 420

<210> 1091
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-061-Q1-E1-A11

 <400> 1091

 cgggtcgatc caaacctcca ggcaagggcg caataaataa tagcaagtgt gatcatccgt 60
 tgatccatct tgctaataac cctgcgtgcc ctctgttctc gtctcgatcc cgacgacgct 120
 cccttcgggt ccggcaaacc acatcaagtc gcgatggaga tgaagaaggt cgcctgcgcc 180
 gtctcgccg ccgcccgcctc cgccaccgtg gtctcgccg ccgaggcccc ggcgcccgcc 240
 cccaccagcg cctcctcggc cgcgttcccg gccgtcggcg ccgtgctggg cgcctccgtg 300
 ctctccttct tcgcctacta cctgcagtaa aattaaagga gggtcggagg gagatgctgc 360
 tggctgccat tgcctgtatt cggttggatt ccgtttatat atatatttaa gtactttaat 420
 ttgggtctga aaatg 435

<210> 1092
 <211> 315
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-060-Q1-E1-H1

 <400> 1092

 ggggggaacc caggctgaga agcccgtgg gggggcctaa ggcgaagtcg ccaccgaaca 60
 agattgacgt tgtgaaggac aacgacatgt ggcagtgcct gaaccagtgc gccggggaga 120
 tcgatgaggc gctggaccac ctggacgaca ccgaaggctg cctcgacgac ggcaagctcc 180
 acgacgtgaa gctgttcctg gacacggcgg aggaggacac gtggtcctgc gacgtctgct 240
 gcaagcacgc cccatccacg cccgtcaaaa ccacgtgct cgccaagaaa aaggacttcg 300
 aggcgctcat gcgcg 315

<210> 1093
 <211> 435
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-H10

<400> 1093

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agccagccag cagccagctt gctcgccgag cncgtccttc ttcttcgcct ccgttccatt 120
ccgtcncgcc ctccaccgcc gccgcccgaat tcagggaagg agatgaagaa gatcgccctgc 180
gcegtcctcg tcgccccttc ggccggccacc gtggcgctcg ccgaggaggc tccggctccg 240
gccccacca gcggctcctc cgcgctcgag cccgcccgtc gcgcccgcct cggggccgcc 300
gtcgctcctt tcttcgcta ctacattcag tgagccggcc ggggcgcccg gaggccgagg 360
aagagacgaa ggggagagag agtgacatgg ctgcgcgcat tccgatgcgt gggcatgttt 420
tttgattcga cacac 435

<210> 1094
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-H11

<400> 1094

gtcgatacac gcctctacac acacttctgt taatatacta actcgacca agatttaata 60
aagtcaagggt acccaaaaac aaacccatgg gatataatgc ttggcatgaa cctctggggg 120
accatatata atgctgtaat tatgtttgtt gcgccattac tattcagtaa ctggccatat 180
gcaaattggtt ttgaggcatt gagatcttgc caggagaacc cagagggtggc ctgggacatt 240
ttctattctt gcctatgtgg cgcggtgggg cagaacttca tcttcttaac catcagccgg 300
tttggtcttc ttactaacac aacaatcact accaccgta aattcatgag cattgtgggt 360
tcattccgta tcagtggcaa tccattatct ttgaagcaat ggggtagtgt tgtgatggtc 420
ttcttaagcc tctctatcca aatata 446

<210> 1095
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-H2

<400> 1095

gggtcgagca cgcgtccgct ctcactgtct cgcgggcccgg ggaaaaagga gggctccgcg 60

gtccccgggg aaaaccccgc aattgcggcg gccgccctga cgggggaaaa tggttgccaa 120

gaattcaaaa ttgatctcaa cagccccctt gttttccaag tttgccatct tgaggaacgg 180

taccaggaat gggttcacca accgatcgtc agcaaggagg gtccacgctt tttcggaaat 240

gatgtcctgg agttcttgac tcgcacgaag tggtagggctg tgccaactat atggctgcct 300

gttgtctgct gcctgctcgt gaaatctatt ctgatgggtc atactgttca ggacgtagct 360

atgatggctc tggttgggat atttatttgg acgctgatcg aatacac 407

<210> 1096

<211> 273

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-H4

<400> 1096

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ggccggggccg tggaaacctt gccacgcgac cttctacngc gggcggggacg ggtccggcaa 120

cacggcgggc gcgtgcgggt acaaggacac gcgcgagcaa gggtagcngcg tgcagacggt 180

ggctgtgagc acggtgttgt ttggcgatgg cgcggcctgc ggcgggtgct acgaagtgcg 240

gtgcgtggac agccccagcg ggtgcaagcc cga 273

<210> 1097

<211> 208

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G1

<400> 1097

ggaatgctag aagttcagtg agcgatttgt tggggcatgc atgatcgag acagctgcgc 60

caatgtgtgc cgcggtgagg gcttcttggc cggcaggtgc agcaccttcc gccgccgctg 120

catctgcact acgcaatgct aaacaagatc gctcgatcgc ttgccatgca tcgacaacct 180

attcttaata acgttcatta tctcgttc

208

<210> 1098

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G4

<400> 1098

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aaaaaaggat tctgaaggca taccggtgaa aaaaaccgga aaggccctgg taatcggaat 120

ctacaacaag cccatgaccc ctgaacattg caacatggtg gttgaaaggc tcggtgacta 180

cctcttaaag caaggcctgt gaatgcatca aaacaacgac accaacgcca aaattaatta 240

attagtagtc tcaatgcctt gggattgtgc gtggccgctc cgttgaacac caccatcct 300

tcgttcggca ttttttcccc cctttgttta tataatttat tgtatcgttt tggcaaataa 360

ttttgtgatt cgaccccaaa gcaagtttggt ttgtcctacg aattgtaaac ctgggacaat 420

atataatg 428

<210> 1099

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-F1

<400> 1099

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aggggggtcc ccggtttgaa tagttgattt ccatttcagg gtgcgcatct gaagggtgcy 120

ccagggtgctc ttgctgtgtg atctttgtcg ccttgtgacg ctggggaccg ggttattggc 180

gggagtttgt cagaataata cataaagaac tggtgccacg agatcggggg acttcagatc 240

agggaaacct tgagccatgg gcacagttgt ggatgccgct ccagcagttg tggctgaggt 300

cactgagaac atgttgggtg gcaagaaagt tacagttgta tttgtcctaa gtggtcctgg 360

aagtggaaaa ggcacacagt gtgccaacat cgtggagcac tttggattca cccatcttag 420

tgctg 425

<210> 1100
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-060-Q1-E1-D1

 <400> 1100

 tcggcaacca ccagaactcc aaccgttcgg ccctggaacc ttaagcctct tcgttcctggc 60
 tccggaatcc aacggcggcg ggaaaaaacg ggcaattccc aaaacaggaa ccgaagggaac 120
 aaggttggag gataaccccc cgctaacaaa aacaataaag ggtgcggtaa aaggaccccc 180
 cccggggaac atctggggca ccgtcgtcgc cacctggtac gacgtgcccc gtgtggagcg 240
 ccacgtcgcg ctccctggcc ttatccggac gctcaagatg tgcggcacct acggggccac 300
 cttcgccacc atcggggggc tctacatcgg cgtcagcag ctcgtgcaga gccagcgcaa 360
 gaagcgcgac ttcgtcaacg gggc 384

<210> 1101
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-D4

 <400> 1101

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 tggaaaggat ttcgccaacg gcttcaaaaa cttcggcaac aagggcggaa acccggagca 120
 tttcgacca agcataaacc cgtcctacgc cagggngctg caggacgtgt gcagggacta 180
 cctcaaggga cccaccatcg ccgcgttcaa cgacatcatg acgcccggca agttcgacaa 240
 catgtacttc gtcaacctcg agcgcggcct cggcctgctc agcaccgacg aggagctgtg 300
 gacggacca cgcaccaagc ccctggtgca gctctatgca tccaacgcca cagccttctt 360
 cgacgacttc ggccgcgcca tggagaagct c 391

<210> 1102
 <211> 403
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-B1

<400> 1102

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caagttgggt aacaacaaca agggcggagt tggtaacgtc aacttatcca attgaggctc 120
gcaacttcaa gaacggaagt cctctcaaca caagcccaag ttagctcaca catcagcggc 180
aagtcgtcan ctcaactgct cctgtaagct tgccacctcc tgaagtaaag tcttccccac 240
caccagcacc gattagctct ccaccacctc cggccaagtc accacctcca ccgggcccta 300
tgagctcact tcttccccct gtgaagtctc canctccacc agcgccggtc agttcgccan 360
canctccaat gaagtcccaa cggcggcagg cacaattagc tct 403

<210> 1103
<211> 389
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-C1

<400> 1103

actcctcccc aagaaaactg gaattaaccg gcaattttat tgaaaaggga aatgaaaagg 60
aaggccaacc aaaaattaag cggtagatga caatgatgga ctccatgacc gatgcagagc 120
ttgacgggac ggacccaaag ctgatgaacc agtcacgaat caaccggatc gctcggngat 180
ccggcangcg cgtggaggaa gtggtgcaca tgctggacga gtacaagcga attgccaagg 240
tgtggaagaa attgccagtg ttgaacaaca acaggagatc ggatatgaac cgcgacatta 300
ngcgcataag cgatgagatt cctcccaata tgctgactca gcttgggtggc atcgctgggc 360
tgcagaatat gatcaaaca atgggcggg 389

<210> 1104
<211> 308
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-H12

<400> 1104

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 tgggagcgaa ttttagactg tgggttaaaaa actctcctcg tctgtctcac gctaaagcac 120
 aggtctaagg cttacctcgg gtcgtgggtcgt ttctcacatg ggcttcaatg ccgctgtcgt 180
 accccccccac tccccagcgt acgtcatcgt caatttggtc acacatgcga ctatccatgc 240
 tgatatggac ggcgtcatg tagtctattc ctactaagtc tggcattttc cagggctaag 300
 tgtttttt 308

<210> 1105
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-H3

<400> 1105

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 tcgcgtgggg cgcgctcgggtg gacaagggca ggatggcggg cgtggactac cacctgcgcg 120
 cgaccacgac ccccggaag gtgttcggct tcttcggcgc gctgggcgac gtggcggttcg 180
 cgtacgccgg gcacaacgtg gtgctggaga tccaggccac catcccgtcg actcccgaga 240
 agccgtccaa gaagcccatg tggaagggcg tcgtcgtcgc ctacgtcgtc gtcgcgctct 300
 gctacttccc cgtcgcgctc atcgggtact gggcggttcgg caacagcgtc caggacaaca 360
 tcctcatcac gctcagcaag ccaggtggg tcaacgcgtc cgccaacatg atggtcgtca 420
 tccacg 426

<210> 1106
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-H4

<400> 1106

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 tcgtcccacg ctccgtcttt atttgtaatc tgaagcttac aggaacattt gagtggatca 120
 tggacggatt ggtaggcctc ttgaaagtcg ggggtggtgag gggcatcaac cttgcctacc 180

gcgacgcaag aggcagcgat ccgtatgtcg tcttacgact tggcaagaag aaacttaaga 240
 cgagcgtgaa gaagagatct gtgaacccca tctggcacga ggagctaact ctgaccgtca 300
 cagatcccag cctagctctg aagctggagg tggtcgacaa ggacacgttc agcagggacg 360
 acccgatggg gga 373

<210> 1107
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-A11

<400> 1107

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 tcacactatt gatcgaggat gtcgtacgcc tacctcttca agtacatcat catcggcgac 120
 acaggcgtgg ggaagtcatt cctgctgctg cagttcacgg ataagcgctt ccagcccgtg 180
 cacgatctca ccatcggcgt tgaatttggc gcccgcatga tcaccatcga caacaagccc 240
 atcaaactcc agatttggga cacggctggc caagaatcat tcagatctat tactaggtca 300
 tactacagag gagctgctgg agcccttttg gtttatgata tcactaggag ggagaccttc 360
 aatcatctcg caagttggct agaagatgcc aggcaacatg caaatgctaa catgacagtg 420
 atgccgattg ggaacaaatg 440

<210> 1108
 <211> 414
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-A3

<400> 1108

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 aggcgtcctt ctctcagatg tcattctgtc ggggcctcga tggttcttcc agtgaaggat 120
 ctctagccc cggtaccagc gctccgaacg aagagagcaa ccctgcggca gcgagcaaga 180
 ggccgtatct cgagaggaac tactccgtgc tggaaccttc agaagggagc cagctcgccg 240

acgacgtgga aggggaaagc tctctcgaga acgtgaagaa acagctcgag ctcaacaaga 300
aggcaatggc cgctctttac aaggagcttg aggaagaacg gagcgcttcg gcggtcgcgg 360
ctagccagac gatggccatg atcaataggc tgcanganga gaaggctgca atgc 414

<210> 1109
<211> 110
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-A5

<400> 1109

tgagtcgtat taaactagtt gttcgtcatg ttctctgact tttttgttaa gtatcatatg 60
tgatattgac tctatagttc atggagttaa ggatgtcata atgggggggg 110

<210> 1110
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G4

<400> 1110

gggccgagca cgcgtccagt gcaccaggcc atcaagtggg gcaccgacta cctgctgaaa 60
tgcgccgcca ggaagaacaa gctgtgggtg caggtcggcg atcccaacct ggaccaccag 120
tgctgggtgc gtccggagaa catgaaggcg ccgcgcacgc tgtacgagat cgactcgaag 180
acgcccggga cggagatcgc cgccgagacg tcggccgcgt tcgccgcctc gtccatggtg 240
ttccgcgacg acaagaagta ctccgcgaag ctgctgaaca aggcgaagct gctgttcacg 300
ttcgccaaga gccacctggg cagctacgac ggcgagtgcc ccttctactg ctctactcg 360
ggctacaacg acgagctgct gtgggccgcg acctggctgt acctggcgac aaggcggcag 420
gtgtacgcgg acttc 435

<210> 1111
<211> 198
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G6

<400> 1111
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 atatcagaca tcgacgccga cgcagctgcg acgaagacct tgatggggcac gtacgatgtc 120
 aggacgacca tccgacaggg caggttcccc aaggtgaaac acgcgcccga ctctcacatc 180
 cggctcatcc gcaccatc 198

<210> 1112
 <211> 235
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G7

<400> 1112
 ctgcggggtc gacacaagcc tcaacactca gtcctactac ccccgccggg cagcacctca 60
 gccgccgcaa ccgcgagact atccatgggc gcctacgcaa ccaatcgcaa gactcttgat 120
 gggcatgacc gacttgacgc cgtcgtctcc acacacaaag ttgcgcccga cgccattcca 180
 gtctcagttg aagttgcggc tgatgaaaag gtacatcata acgtggtgct ggatg 235

<210> 1113
 <211> 431
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-059-Q1-E1-F12

<400> 1113
 ctgcggggcc gacacaagcc tcaagcgtca ctcatccaag acgatgacaa tagccgccgt 60
 gctctgacct ctctcttct ctggccgtct cgccgcggcg gagaagactt tccgcggagg 120
 cggaggcgga ggctacggcg ggttgagggc cggtggcgga ggcggcgcg gcggctactc 180
 cccccgagc gaggcagcgc catccacgcc tgccgctggg gagacgacga ccccttcgtc 240
 aggcggcggt tactccacct ctacgaggc agcgccatcc acgcctgccg ctgaggagac 300
 gacgacgact ccttcgtcag gcggcggggg ttacggcggt gcaaccggca aggttcctc 360
 aggcggcggc gggctggacc ccgacggcga ccagaggtt gggctgaacg ggaaggcgat 420
 cgangagatc g 431

<210> 1114
 <211> 384
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-F2

<400> 1114

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gggtcgagca cgcgtccgac gacgttggca agagaggagg gccggcgctcg gcgtagcctag   60
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ctcctcgctg tcgccgtcgt cctctccaac gtccctcctt cgggcgcctt ggctcctcgt   180
tcgtcgtctc tgctgcacca gtcgtctccg tctgagagtg agactgagac cgacagtagc   240
agcggagaat cttcttcgtc gtcgtcgtcg gaagaggccg gcgagaagga gaaggagaat   300
gagcaggaga tggagaaggc ggtcgcggcg gagaaggctg cccagcagga gctgctcaag   360
tacgccaagg agaagggcat cgtg                                           384
  
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<210> 1115
 <211> 315
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-D6

<400> 1115

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gctcaagatt tcaagacgga tctgcgcttc tagagccagg ccgtgcttgc tctgcaggat   120
gcagcacacg cctacctggt tgggctcttc gaagatacca gtctgtgcgc gatccatgcc   180
aggcgcgtga ccatcatgcc cagtgcatt cagctggcaa caaggatccg tggcaagagg   240
gcgtatgtct gtcgacgaga tgaagaactc tgcgctcgtt ttgtgtgttc gcctctctca   300
ccctgtaagt tttgt                                           315
  
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<210> 1116
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-B12

<400> 1116

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gcgtaccaaa ggaactggat cgagatcgag aacgtcgaga acctgtccat caacggccac 120

ggcaccatcg acgggcaggg agccctggtg tggagcaaga accagtgccg gcattcttac 180

aattgcaaga tcctcccgaa tagcttggtg ctggattttg tgacgaacgt ccagatccgc 240

ggcatcacgc tgctcaacag caagttcttc cacctcaaca tcttcgagtg caagaacgtg 300

ctgatcgaca aagtgcggt caaggccccc ggcgacagcc ccaacacgga cggcatccac 360

atcggcgact ccagcaacgt gaccatcagc agcaccacca tcggcgtcgg cgacgactgc 420

atctccat 428

<210> 1117

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-B3

<400> 1117

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tcggaagggg ctagagatgt atgacttccg cttcgacgcg gctgattcgg ctgtcaagct 120

tcccagccag ctgcgctgcg ctccgcattg ctcttgatgg catccagtag atctgttcgc 180

cccccaatat caaaggccgg aggaggaata aacgttaggg agtcggccat gggatgcttt 240

tcatgctgct gtgtggcaga tgacgacaac gttggcagga ggaatgagca tgacgatgcc 300

tatgttccta tccctgctca tgtttataat tttggagcta gccggttccc agccccaggc 360

cctggtcatc tcg 373

<210> 1118

<211> 216

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-H4

<400> 1118

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ccgagagacc tcagccctca ggcaagccga ccgccgacgt accaccgcgc caacccgaga 120
gaaagatgga tatgatcaac aggatgctca tcgccgcgct cctcgtagtc accgtctcag 180
ccagcgcatt gctggcctcc atcgaagccg ccgccg 216

<210> 1119
<211> 337
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-059-Q1-E1-A2
<400> 1119

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cagccgcgtc gtttgtgcgc acagtactg ctgatgattc tcagctgccg gctcactgca 180
ccgtgggcgc gtccgccgaa agccgtccta atcatgcacg caagtggacc actgggcggc 240
cgtggacctc cgggatctct cagcgcgct tcggctcggc tcaccacagg tgcctcacta 300
cggttacttt acgtaccga gtccattgca ttggttg 337

<210> 1120
<211> 385
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-A3
<400> 1120

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cgctgctgc ttctggttg tggtgcgcgc gcggtagtgg agttggtgcc tgctgatgat 180
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gcgaccccg tgagcgtgga ggaggcgtgc cgcggcgcgt ccgagacgca cgccggcgtg 300
gcctacgacc actgcatggc gtcgctgggc gccgacccgc gcagcaagga ggccggcaac 360
aagaacatgc acgggctggc ggtgc 385

<210> 1121
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-A9

<400> 1121

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tacctgtatg gcgagtcctt atacttactc atacataagc tgcgccgccg tgtcgtccgg 180
acgcgtgggg ccgtagggcga gtgcggcggtg gacgaggagg aggagctcgg gctgagcggc 240
ggcggcggca tcggcgccgg cgacgcgctg cggcggacgc ttgcgcagcg caagccgacc 300
aaccggtaca tcagctacgc ggcgctgcgc gcggaccacg tgccgtgcaa caagcgcggc 360
cggtcctact acaccaactg cgcggcgcag acggccgccca acccct 406

<210> 1122
<211> 301
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-H2

<400> 1122

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cagcagccgc ccccgctcgc ggtgctggag cgcgtgcgcc gcgtcggcag cggcgcgggc 180
gggacggtgt ggatggtgag gcaccgcggc acggggcgcc cctacgcgct caagggtgctg 240
tacgggaacc acgacgactc ggtgcggcgg cagatcgcg gcgagatcgc catcctccgg 300
c 301

<210> 1123
<211> 210
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-B9

<400> 1123
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ccgtccacac ctccctggtc agtcgtatac gaggatcatg ccggctaacg tggacgccgc 120
ggcccagtac cggtaggagg ttgcccttag cagcgttccc ggcgtccaga gagtgccggt 180
gtgcagtgga ctgttcggtc atcgaggccc 210

<210> 1124
<211> 183
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C10

<400> 1124
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ctttgtcatg ctgatcttgg cgccttggct gggacctcct gccctcgtgg tgttcagggtg 120
gatcatcatc acgcagctgc gctgtctgcg gcgtcggctg tgttcggttg ctttcttcag 180
tgg 183

<210> 1125
<211> 285
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C3

<400> 1125
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tggatcatgt ggaacaaatg acggcaagga cgaattctgg atctgttggtg atagttgtga 180
gcggtggtac catgggaagt gtgtcaagat cactcctgca cgtgctgagc acatcaagca 240
ctacaaatgc ccagattgca acaacaagag ggcaagagcc tagcg 285

<210> 1126
<211> 231
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C4

<400> 1126

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gatcacgtgg gacacatgcc cgacaggaca agttccggct cagacgagat acttctgagc 180
tgtggtagca tgggaacatg cgtcaagatc acatccggca cgtgcgacag c 231

<210> 1127

<211> 307

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-D12

<400> 1127

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tctcttcggc tccggcaaac cacatcatgt cgcgacggag atgaagaatg tcacctgcgc 180
cgtcttcagc agggccgcct acgccaccgt ggtccacgcc gccgatgcta cggctccac 240
cactacgagc accacctcgg ccgcattaca ggccgtcggc tctgtgcagg gagatacagt 300
gctctcc 307

<210> 1128

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-G5

<400> 1128

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gggcctagtg ggactgcgcc actgcgatct cgccaccagc ggctccgccc agcagaaaga 120
cattgacctg ctgaggagcg tcgaaggctc tagcgacggg atcaggcccc agtcccaatg 180
ccggttctcc agactgaatg aagctggctg atacggaatc cgatgcaccg gcgcctgcgc 240
cggcgccggg gccgtcgtcc ggttgaactg agaagcgtgc gttcagccaa gcaaagtgg 300

caaaaccgag aactaattaa tgggtccatc gtgtgtcagg ctactattgt tcttgccata 360
 agtatatata gatgcgcaaa gtg 383

<210> 1129
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-G9

<400> 1129

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 cacggcatca gcatcggaag cctagggcgg tacaaggacg agaaggacgt cacggacatc 180
 aacgtcaagg attgcactct taagaagacg atgttcggcg tccgcatcaa ggcgtacgag 240
 gacgccgct ccggtgtcac cgtctccaag atccactacg agaatatcaa gatggaggac 300
 tcagccaacc ccatcttcat cgacatgaag tactgcccc acaagttgtg tactgccaac 360
 ggcgcctcca aggtcacctg caaggacgtc accttcaaga acatcaccgg cacctcctc 419

<210> 1130
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-H1

<400> 1130

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 catgaaggct gacaaaggcc cttggaagga ccccgaaatc atgaagatgg ttcaaagtgg 120
 tgatgggagg tgtggatcac tcggtacggc ctctttcgag gctccggaga aaatgatttg 180
 tgaagacgac acgtatccta agaaacaagc tttgtttgat ggggaaacac aattagctgg 240
 agacgagcat tctcagtcac agaaaatttc ccggtggccgg attgaacatc ctcacgtgtc 300
 acctcttcac gaggaactta tccccacttc aattcatacc cctggattac cctattcttg 360
 tgatgtcccg atggttgaag aggccataga cgccatctgc aagagccacg gaacaccacc 420
 ag 422

<210> 1131
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-H2

<400> 1131

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 cctaccccat catcatagac cagaagtact gcccacaaca catctgcgtc aagtccggcg 120
 cctccaaggt ggccgtcaac gacgtcgtct tcaagaacat ccacggcacc tccaacacgc 180
 cggaggccat cacgtcgaac tgcgccaaac acctgccctg ccagggcggtg cagctcatca 240
 acgtcgacat caagtacaac aggtccgaca acaagaccat gtccgtctgc aagaacgcca 300
 tcggcaagtc cattggcatg gcgaaggagc tcgcctgcgt ctgaacctac ttgcatccat 360
 cactcactct tcgtcacctc tctctttctc actctcgcca gtcttttt 408

<210> 1132
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-H8

<400> 1132

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 tgcccggccg gaccttcgcc catgatcaca gggagaacat cctttgcttc ccatgggcat 120
 gaagaataac caagactccc agttggtcat gggccggtac aggctgggac aactcctcgg 180
 cagcggcaac ttcgctaagg tgtacaaggc ccataagggt gccaccggcg aggctgtggc 240
 cgtcaagggt ctggacaagg atgctgtgca ccgctccggc atggcggaga aggtgaagac 300
 cgaggctcgc gtgatgcggc gcgtgcgcca cccgaacgtc gtccgcctcc acgagatgat 360
 ggccacgcgg tccaagatct acttcgtcat ggaatacgcc agcggcgggg agctcttcc 419

<210> 1133
 <211> 381
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-F12

<400> 1133

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gccatggcct cgattccggc gacgaccttc gccgtcatct tagccgtcct cttctgtgcc 120
gcggctggca ccgccgtcga caacgacctc cccgactacg tcatccaggg ccgctcttat 180
tgcgacacct gccgcgccag gttcgtgacc aatgtcaccc agtacatcgc gggcgccaag 240
gtgaggctgg agtgcaagca cttcggcacc ggcaagctcg agcgtccat cgacgggggtg 300
accgacggga acggcacgta cacgatcgag ctcaaggaca gccacgagga ggacatctgc 360
gaggtggtct tggtggagag c 381

<210> 1134

<211> 135

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-F4

<400> 1134

gtattatggc acgctgcggc acgccgtgat ccaggaccgg ccgctgtgga tcgtgttcgc 60
gcgcgacatg gtgatcgagc tgccgcagga actgatcgtg aaccacatca agacggatcg 120
atggtggggg cgcg 135

<210> 1135

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-D12

<400> 1135

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ccggaacggc actgtcatca tcacgttacg aggtcttcgt cggagcgcgt aatgaggtgc 120
ctgaccgacg aggacctgga cgagctgcgg ggctccttcg agctcgggtt cgggttcgac 180
gaggagtccg gcggcgccca cctccgcgac acgtccccg ccctcgactt ctacttcgcc 240
gtgaaccgtc agctgtccga ccccgccaag ctgcggacgc tgctcgtcggc ggcgagcctc 300

acgtccacgc cgtcggccgt gtctctgtcg tccacgtcc cgcagctccc gaacgaccca 360
cgcagcccca acgtcggcgc aaccgcccgc tctggcg 397

<210> 1136
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-E12

<400> 1136

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taaccctgcg tgcccttcgt tcgctctcg atgccgacga cgctcccttc ggctccggca 120
aaccacatca attcgcgatg gagatgaaga acgtcgcgatg cgccgtcctc gccgccgccg 180
cctccgcgac cgtggctctc gccgccgacg gcccggtcc cgccccagc agcgcgctcc 240
tcggccggcg ttcccggccg tcggcgccgt gcggggcgcc tccgtgcgct gcttcttcgg 300
ttagtagctg cggttaagtgg taggggagg 329

<210> 1137
<211> 256
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-E2

<400> 1137

gggccgtggc aagcctctgc agtaggtccg atcaccagcc ggggtgtcac gctctggtac 60
cgcccgccgg agctgctctt gggcgccacg gcgtacgagc cctccgtcga cctctggagc 120
gccggctgcg tcttcgcgga gatgcacgcg cgccggcccc tcctgcaggg ccgcaccgag 180
gtcgagcaga tccacaggat cttcatgctc tgtggctcgc cgccgaaga cctctggcgc 240
cgcttggggc tctccc 256

<210> 1138
<211> 435
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-057-Q1-E1-E3

<400> 1138

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ataccaccac cgtagcacca cacgcaggta cgaagaaggc gacgaacatg gcgaggctgg 120

ccttggtagc ggcggtggtt ctgtgcctcc tgtagcgac agggccgcan ggggccatca 180

gcgccgaggg gatggtgtca tttgacaatt tgatcagctg caaggtactg ggcaactgcg 240

acaagaacct gggccccgag gcctcccgcc cagggaacc cgccaacgac tacacccgcg 300

gctgcaacc gataccggc tgtagcggt gatcatact ctctggtcga tgtgcgcgca 360

atgtcaatgt cgcacgcgcg tgcaggtacc aggcctcagc gtgtggtgcc gcgtgtgtgt 420

atatattaca cacat 435

<210> 1139

<211> 308

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-E5

<400> 1139

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gaaaatgtcg cgcgccacag ctgcggtcct cttctacatc ctgcgccgtcg ctgccctcag 120

cgcggccggt gcaccggcag agtcaccgag ggcaggcagt cctgccaagg caccggccga 180

gtcaccgaag gtaggcagtc ctgcagctcc tgccagggca cccagagtct gctgccacga 240

gaactgcccc cgcgaaagca gctcaggccg actcgagcac cgtcggatgc ggctgtaggc 300

atggtcgt 308

<210> 1140

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-A8

<400> 1140

acaacactct atagtgcgt cgtattaagc cctcagaatg gcatcaacac gtgtgatctc 60

caccttgagt atagcggcag caactaggca ggaccacggc gatatgcaca aactcgacgg 120

gcagcacaaa tggttgactc accgaacttg catgcttcaa aacactgtct cgactgacgc 180
atctcactac ttatcagtta tctcacgtcc ctgcattgca tatcatgtgc tatccattgg 240
ttaccacaaa cagtataacg tacaacatcc agcagctata ttatgttcta cagtgttaaca 300
ccctgaattt tacggtacaa aatttcattct ttaaattgcaa accacattca ggtgttacct 360
cttgtctctc tctctatctt ttc 383

<210> 1141
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-B3

<400> 1141

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ccctccacct cgacgggtac gccttcttcg gcgtcgggat ggggcctggg acgtgggtcg 120
cggagatgag gaagacgtac aacctactgg acacggtgag ccggcacacg atccaggtgt 180
acccgcggtc atggacggcg atcatgctga cattcgacaa cgcgggcatg tggagcgtcc 240
ggtccaacgt ctgggagcgg tactacctcg gggagcagtt ctacatcagc gtcattctcg 300
cggcgcggtc gctgcgcgac gagtacaaca tgcccacaaa cgccctccgc tgcggcaagg 360
tcctggggct gccgctgccg ccattctacg cccccgcgcg ctaa 404

<210> 1142
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-B9

<400> 1142

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accaaataag gtcccgcctt tttccgacat tcacaggggg gacaggaaat cagcggccat 120
ggcctcgatt ccggcgacga ccttcgccgt catcttatcc gtctcttct gtgccgcggc 180
tggcaccgcc gtcgacaacg acctccccga ctacgtcatc cagggccgcg tctattgcga 240
cacctgccgc gccgggttcg tgactaatgt caccgagtac atcgcgggcg ccaacgtgag 300

gctggagtgc aagcacttcg gcaccggcaa gctcgagcgc tccatcgacg gggtgaccga 360
 cgggaaacggc acgtacacga tcgagctcaa ggacagcca 399

<210> 1143
 <211> 149
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-C1

<400> 1143

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 cttgtgctgc ctaacctggg ggctattaga ttatgttggg actccaaaga catgatttag 120
 aggttaagaa tttgaatcca agtttggac 149

<210> 1144
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-C2

<400> 1144

gggtcgatac aagcgtctac actcacttct gcgtgtctca gctatcgggt ttgagggcta 60
 tgagaagcgc cttgagatca cattctctga ggcacctgtc tttgtggacc ctcatgggcg 120
 tggtttgcgt gccctctcca gggcccagat tgactctgtt ctggatcttg cacgggtgcac 180
 aattgtgtct gagctctcca acaaggattt cgactcatat gtcctttctg agtcaagctt 240
 gtttatctat cctctgaaga ttgtcatcaa gacctgtggc actaccaagc tcctgctcac 300
 cattccaaga atccttgagc ttgtgaaga gctgtctatg ccacttgctg ctgtgaagta 360
 ctcccgtggg acgttcatct ttcttggcgc acagccagcc cccacagga gcttctctga 420
 ggaagttgct 430

<210> 1145
 <211> 244
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-057-Q1-E1-C3

<400> 1145

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tgctcctcct cctatgaaga aggactacaa gctggctaata cttctctgct gggaaganga 120
agcggatgcc atggaggaga aggcgggagt gcttgatgag taagacgggc ttctggggtc 180
gatttgcttc tgagttgttt attttatatc gtcgcaattt cgtggttgtc gtttggttat 240
tctg 244

<210> 1146

<211> 330

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-C4

<400> 1146

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agaacatgga gattgcatca catcctatga agaacgactc catgctggct aatcttctct 120
tctgttacgt ggaatctgca gcgatgaaag agactgtggg agtgattgat cactgtgaca 180
ggcttcatcg gtccacttgc ttctggattg cgaatcatat atcgtctcaa attcgtgctt 240
gtcgatcgat tattcgggtga ttcacacaag cactgtagt gttatcaaaa tttggcgctc 300
gtgtccatgt aaccttcagc ttttgcaaca 330

<210> 1147

<211> 239

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-C5

<400> 1147

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ccgatctcga tggagctgtg atcgtgtcca ctcgatcgag agatcgattg atgcttgaga 120
ttaaatttgt agtccacatt atatataaga gatacagctt aaactaaatt tattccatca 180
agcacgaccg ccgcaccacc gaagtcgtcg cagtcaagta cagcgagcgt ggaaaaagg 239

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<210>      1148
<211>      99
<212>      DNA
<213>      Zea mays

<223>      Clone ID: LIB148-056-Q1-E1-H11

<400>      1148
acaatacaag actctaaatt gagtcagaga atggatggcc ctctgctttg tggaccaaaa   60
agtggttcag gaatagcaat cagttgggct acattttttt                               99

<210>      1149
<211>      396
<212>      DNA
<213>      Zea mays

<223>      Clone ID: LIB148-056-Q1-E1-H12

<400>      1149
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aggcaggcag gaaggcaggt tcgaggaggg attggctccg ctctgctcc attgcgcgtg   120
atccggctcg ttcttttgat tgatctaggc gtttcttga tgctctggaa ggtcaaacgg   180
ttgttggaag cctcgctggg tgcttcaacg aacgcgaagg tggtgctgtc atttagagcg   240
tcttgattgg atttgacctg ttggcctggg ggcgtgccgt cggtgattga gctcgaggat   300
gatcaagtgg gggctcagca gcggcacgcc cgcggtattcc tactacgagg tccggtcaga   360
ttgcacggac ggtgtgcccc agagcaagtt caagat                               396

<210>      1150
<211>      312
<212>      DNA
<213>      Zea mays

<223>      Clone ID: LIB148-056-Q1-E1-H2

<400>      1150
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tgatacttct catgctactg gctttctaag cagctccgcc ggcgagcgcg gtgggtccgcg   120
gtgacgagtg ttatcaggtc tgctaccag tccacatgat tggcgtagga gtgatgtttc   180

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gaggtgaaag cagatctctg ctagccacgg gcccatggac acttacaggg atcacgcttt 240
 tgggttccta acagccacta ttgtttccta tatcatttgc ctagccatgc atgtcttgca 300
 ttgcgttttt ta 312

<210> 1151
 <211> 441
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-056-Q1-E1-H6

<400> 1151

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 gcggcggtgca cggctattgg cttcgtgttc tgctcgattg cgcacccac ccctcctcgg 120
 tagcgcgcaa gatgaatgaa gattggctct ggtctggttg gcgtatcagt agatttcatt 180
 ttcattgcca gtgtgccgtt ttctttgaat tcttgggcgg gttcgagtga ggttttgggg 240
 tttcgcttg ctttcanggg cgggtgtgtt ccgatgacgt ctgccaagta gtaattaatt 300
 ttacaggatt anttttggtg ctgtttcttt gaatgataaa ccgaaatcct tgtttttttt 360
 tgaaaggatt aacatcatat tgctttttta gtgctgtttg gttcatcaac ggtaacatat 420
 atagcaacag taatgattca t 441

<210> 1152
 <211> 249
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-A1

<400> 1152

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 gcgctgctgg tgatgcctt cctggcggcg cagctggtgg cgacgtgcat cgccgtgtac 120
 gccaaactggg agttctgcaa gatgcacggc atcggtctgg gctggggcgg cgccatctgg 180
 gcgttcaacg tcgttgcgta gaccccgctg gacgtcctca aatccgcat ccgcgagggc 240
 ctctccggc 249

[illegible]

acgcgtcaac	atgaactcat	tggatgttgc	aaaaggcaaa	taaagaagaa	aacaaatatt	60
acaaatgcag	tggtatagaa	ccacaatata	tggttcatga	taggcaaaca	tacttacttt	120
tagttcaggt	tattgagatt	tgtgctggac	gaattggtga	ggctgtgtca	atgataaaca	180
acaaggataa	tgattggttt	attcaactca	catgtgccta	cttgtagagt	cttaaccata	240
gggatttact	gtcccaggat	actatgaaga	attaagccag	aattaaattg	gatttaaaaa	300
ggacatccaa	ttgaatatgc	aagagcttgc	tcaatctctc	cttttgagat	gtgatgagaa	360
aactagcaat	aagaagacca	agaaaacctt	atgggatgtc	ctaagaagtt	tatactatgc	420

<400>	1154
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cacacgtcca	ggactggcct	caaaaaaatg	caaccaaaaa	cttccgaccg	gacagccttc	60
ttgggaaagg	agggtttggg	catgtctaca	aaggttggat	tgatgagcac	acgcttgctc	120
cttcaagacc	tgggagtggg	atggttgttg	ctgtgaagaa	gcttaaaccg	gaaggttttc	180
aaggacacaa	ggaatggctg	acagagggtt	attaccttgg	ccaacttcac	cacaagaatc	240
ttgttaagct	cattggttat	tgctcagatg	gtgacaaccg	gcttctggtg	tatgaattta	300
tgcccaaggg	aagtttggag	aaccatctgt	ttagaagaag	tgctgatcct	ttgtcatggg	360
caataaggct	caaagttgcc	attggagctg	ctaggggctt	gtcattttta	catgatgctg	420

<223> Clone ID: LIB148-057-Q1-E1-A4

<400> 1155

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ggcgtccggg ttcattctgca agaacatggg gttccacaac acggccggcg cggagcggca 120

ccaggcgggtg gcgctccggg tgcaggggga cctcgcgggc ttctacaact gccggttcga 180

cgcggtccag gacacgtgt acgtgcacgc gcggcggcag ttcttccgca actgcgtggt 240

ctccggcacc atccacttca tctctcgcaa ctcgcgggca gtgttccaga actgcctcat 300

catcacgcgg cggcccatgg acaaccatca gaactcgggt acggcgcacg ggcgccaccga 360

ccccaacatg aagtccgggc tcgtcatcca gaactgccgc ctggtgccc accagaagct 420

gttcccggac 430

<210> 1156

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-H10

<400> 1156

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tgtcgcgcgc cacagctgcg gtctctttct acatctctgc cgtcgtgcc ctcagcgcgg 120

ccgaggcacc ggcagagtca ccgaaggcag gcagtctgc caaggcaccg gccgagtcac 180

cgaaggcagg cagtctgca gctctgcca aggcacccga gtctgctgcc acgagaactg 240

cccccgctaa ggcacctcaa gccgcctcca ccccgccgc tgccgctgcc ccatcgtcgt 300

cgtcgtctag gaagtctggt ccagctgccg cgccgaccac cgccgcctct acaccgtctt 360

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<210> 1157

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-F9

<400> 1157

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gattggtagg cctcttgaaa gtctcgctgg tccgggggtat caaccttgcc taccgcgacg 120
 caagaggcag cgatccgtat gtcgtcctac ggcttggcaa gaagaaactg aagacaagcg 180
 tgaagaagag atccgtgaac cccatatggc aagaggagct aactctgacc gtcacagatc 240
 ccagccaacc actgaagctg gaggtgttcg acaaggacac cttcagcaga gacgacccca 300
 tgggagacgc ggaggtggac gtggcgccac tgatggaggc ggtgagcatg aaccgcggg 360
 aggagagtct gaggaacggc gccatcatca ggtccgagcg gccgagcgcc aggaactgcc 420
 tcgccgacga gagcc 435

<210> 1158
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-G12

<400> 1158

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 agctattata aatgtatcga atggatccaa gccccactc tttgctggca tcatagcact 180
 tgtgatgagc atcgcaacga tgggtccgtct gaccgcgagc atgatgcctg ggaggggttct 240
 cggtgctgcc ataggtggag ctaccctctc agaaggtaaa tcaaaagtac aagagcgcca 300
 gcggtccaag ctatcagaag aggtctgtga ggaagctgaa gacgccgtct ctgcaaagcg 360
 cctctcggag cttgaggaga aggtcattgc actcctgaca aaaccgcgat caatgcctgc 420
 tgat 424

<210> 1159
 <211> 439
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-056-Q1-E1-G4

<400> 1159

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ctctcctcac ccgctcggag agtcggagcc cggcggccgg agggcgacgt cgtccctaata 120
aaatactaata aatttatcac tatacataac caatatataa gccatgggca agcgcagcgt 180
cnctcggtag cctgaggacn angacaaagg cggctgctgc ggctgcctgt gctggtgctg 240
ctgcttcctg ttgttcacg tggcggcgct ggccggcacg gccgcctact tcttcttcgt 300
gtacaagccc aaggcgccgt cctactccgt gagcaacatg tccgtctcgc agttcgactt 360
cagcacctcc gacctgacgc tgtacgtcaa gctcaccgcc tccgtgcgcg ccgagaaccc 420
caacgagatg atcaccatc 439

<210> 1160
<211> 441
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-G6

<400> 1160

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ggggccagtc ggaggttcag cgttctctgt tcttgataaa acgagagaag gatggcagtg 120
tttcagggag ctgtcctatt cttgtttctc ctctcgtcg cagcagaggt gggaaccatc 180
gatgccaaaa tgggagtagc catgcccacg catgccttga taatggagaa agcgaaacag 240
caggagacgg agaagaagga ggagaaaagc acggagaagg aagagagtca atgcttatcg 300
ccgagtctcc agttcgaggg cttctgcttc aacagcgaca gatgcgccga ggtgtgcatg 360
aaggagagct ttcccgggtg cgagtgcaag cgggacgtgg ccatgcgcaa gtgcttctgc 420
aagaagcctt gctagttcat c 441

<210> 1161
<211> 291
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-E10

<400> 1161

cgacacaggc ctccaagcga gccaaagccag cgcgaccagc gaggagtga ctgttgcttg 60
gggagtctgt aatcatgctt ttcacgtcca ctgcgtcagc aggtggctta agactcgtca 120

agtggtccca ggggagaaca gtgggtggga gttccagaga tagggccacg agttcctggg 180
cacgctcatg tgatgttggg gcttacttct agtgagtgt accactcgag tgtagttttt 240
tctgcgaggc agctccatcg tttaacgcct tggctgctg caggtagcag a 291

<210> 1162
<211> 127
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-E9

<400> 1162

acgcgaccag cgaggactgc agtggtgctt ggggagtctg taatcatgct tttcacttcc 60
actgcatcag caggtggctt aagactcgtc aagtgtgccc aggatataat agtgagtggg 120
agttcgt 127

<210> 1163
<211> 261
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-F4

<400> 1163

gacgacaacg tgctctaaga ggacaagctt tgtttgcatg gggaaacaca attagctggg 60
agacgagcat tctcagtcac agaaaatttc ccgtggccgg attgagcatc cgtcacgtgg 120
gagctcttca cgatgaactt atccccactt caattcatac ccctggatca ccctagtctt 180
gtgatgtcgc gatgggtgaa gaggccatag acgccatctg caagagcgac gggacagcac 240
cagagtgaga agattgccat c 261

<210> 1164
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C4

<400> 1164

gggaatatat agttcgtgaa tccctgaagc gtgcatatat atattcctgc cacgatgaag 60

gtaatggagt cgtcacgcag gttccagccg ggcgtcatcc tgcgtctcct gtcattgtg 120
 tccaccgata tggcacaggc aaggggaattc caaaagtaca gtgagcgatt tgttggggca 180
 tgcatgatcg cagacaactg cgccaatgtg tgccgcgggtg agggcttctt ggccggcagg 240
 tgcagcacct tccgccgccg ctgcatctgc actaggcagt gctaaacaag atcgctcgat 300
 cgcttgccat gcacgcagaa cctattctta ataacgttca ttatctcggt cttatttatg 360
 acgaatgtca tgtatgttct ggtgactgtc atgtatattc tgatgactgt catgtat 417

<210> 1165
 <211> 161
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-056-Q1-E1-A4

<400> 1165
 aggcccccg ggaaaggccc aaacagggac ggatccacat cggcgactcc agcaacgtga 60
 ccatcagcag cacaccatcg gcgtcggcga cgactgcac tccatcggn cccgggagcaa 120
 gatgatccgc atccatggcg tcaagtgcgg gccaaaggcca c 161

<210> 1166
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-A5

<400> 1166
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 cgacgccagg ttctcgagg tcaagtctg gtcacctcc acgctcggcg gcaccgccac 120
 ctgcgaggac gctgcaagg acgccccgt cagcgacatc aagaacgtct gcataaccaa 180
 gagcttcgag ttgagaagc tgctgcgct cagctggac ctcatcaccg aggttccgg 240
 ctccatgtcg gccgaggtcg cactgccgcc gtcggatgcg tcggcgccgt cccgagggta 300
 cggctcgtcg gctggcgccc ccgctacgg cgcctctct cctgatgcc cagcttatgg 360
 cgccagcgta ccagcgccag cgccgagctc ggggcagagc actgcttcga ctgcatga 418

<210> 1167
 <211> 128
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-A7

 <400> 1167

 ccggggccac ccacgcgtcc ggatacgccg gcgacatctg gagcttcggc ctcagcatcc 60
 tcgagttcta catgggccga ttcccgctgg gcgagaacct ggggaggcag ggcgactggg 120
 ccgcgctc 128

<210> 1168
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-B12

 <400> 1168

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 aggaccgtta tgaggccacc acaagttctt agggagggaa caaagaagac agtttttgtt 120
 aactttatgg atttgtgtaa aacgatgcat aggcaacctg agcatgtgat gatgttttta 180
 cttgctgaaa tgggaacaag cgggtcactt gatgggcagc aaagggttggg gatcaaagga 240
 agatttgccc ccaaaaactt tgaagcaatc ctgaggagat acatcaatga gtacgtcatc 300
 tgcaatggat gcaagagccc tgataccatt ctgtccaagg aaaatcgtct gttcttcctt 360
 cgctgcgaac agtgtggatc ttcaaggctc gttgctccaa tcaaagctgg attcgttgct 420
 caagtcggt 429

<210> 1169
 <211> 251
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-B4

 <400> 1169

 gcccgcttca accactgcct ggagcagtac ggcggcgccg ccgacctcct ccgggacgcg 60
 ctgggcaagc tcaaggcgaa gatctacggc aaggcatgg agcagctgac cgccgcaatg 120

ggcgctccg agagctgcga ggacgcgtgg aacggcgatg aggaggatgt ccccgtcgcc 180
 gcgcacgaca gggagtacgg tcggatggcg cagatcgccg tcggattcag acagcacgcc 240
 gccgtcgccg c 251

<210> 1170
 <211> 441
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-056-Q1-E1-B8
 <400> 1170

tccgggtcgn naaagcgtcc accacgcgtc cgcgagatcg caacaacgat attgctaagc 60
 aagataagat ttcaactttt tttcccctgg atcgatctca gattaggagg agcaaataaa 120
 gcaagaatag aaagattttt gggggagaag gcatgatgct ggaagggaag tcctaccttg 180
 tgtcacgctc cgtgccgagc tcctgcgagc cggaggcgga gtgggagtac ctgccccacg 240
 cggtcctcag cggcaagcgc cgggcgccgg aagatgacgt cgaggtcgaa gacccggacg 300
 aaactggcag cggcggcaag cgcagcaagc cggcgtctcc gcagccgcac acgccggaca 360
 tctgcgaggg ccacggctcc aaccgccacg cactgggttc cggagagcag cggatcaccg 420
 ggagcaaccc catgacttcg a 441

<210> 1171
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-056-Q1-E1-A3
 <400> 1171

tccacgcgtc cgaacacgcg tcaggttgac ctatgccttg atcgcatcag gaagcttgcc 60
 gacaactgca ctggtctcca gggcttctc gtcttcaacg ctggttggtg aggaacgggc 120
 tctggccttg gtccctcct cctagagcgc ctgtctgtg actacggcaa gaagtcgaag 180
 cttgggttca ctgtgtaccc tccccccaa gtttctactt cggtagttga gccatacaac 240
 agtgtactgt cgagcgattc cctcctcgag cactgatg tggctatact gctggacaat 300

gagggcatct acgacatttg ccgccgatcc cttgacattg agcgcgcaac ctacaccaac 360
 ctcaacaggc ttgtgtcgca ggttatctca tcgcttactg cctccctgag gttcgatggt 420
 gctctgaacg tggatggt 438

<210> 1172
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-053-Q1-E1-H4
 <400> 1172

caggctgctc tgaatctcgt cgtcgccttg gcgacgtgta caaacaagtc tgttgatgcc 60
 cgcggtggtcc accccatcgt caccctcgag gccgatggct catctccac ctctggcgat 120
 ggtcgtcgcc tgatcagctc caccaaccaa gatgaacttg gagcgttatg ccaacagatg 180
 cactacaaga cgttgtgctc cacgatgacg aactgcctg gggtgactac gccagagcaa 240
 ctcttagatg catccctgcg gattacagcg gtgaaggcag cgatggcgga gatgaagcta 300
 gacaatgcaa taaaatcagg cagtgtcaa ggtaaccgga tgatgtcgtc gctaaagaca 360
 tgcaaggaga gctacgcgtc gctggtagac tccatcaatt acacgcggaa cacgctca 418

<210> 1173
 <211> 445
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-056-Q1-E1-A1
 <400> 1173

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 gcagccctcc tccttcttga agcgaagccc cttgaaatga atgaagcatg catgcatgca 120
 tgtatgcatg cgccggggtg acgtggcggt cagctcaggc gctgagcaag tctatacgta 180
 cgtcgtcacc ggctggccac gcatgcgata accatctgat atggacggga ctatatattg 240
 tagtcctaag aatctgggca ttttctaagc taagtgtttt tttccaaata tagcgtcgat 300
 ggaactccag agtgtaaagg tcacgcagat ggtgtgtttt tcagcgattg aatgggtaat 360
 aataaaaagg catgctggca gttactagta ggagagaggc gaggggggag ggggagggag 420

ggagggaggg ggggggggga ggggg

445

<210> 1174
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-A12

<400> 1174

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gtctcccacc agcggctcct ccgcggtcgc acccgccatc gtcggggccg ccgtggcctc 120
cttcttcgcg tactacattc actgagccgc cggacgagga gccggagccg gagggaagag 180
accaaggtgg ggggagagac ttggctgcbc tgcgctgctc tgctgctccc gcgcattccc 240
gatgcgtggg cgtgctctga ttgggcacgg cggcggcagt ggcacacctt cgtcttcctt 300
ttgtttgttt tttttccttc ctctttctac ttgattttca tttaacgaat tggatcgcct 360
gatgcaccag ttttaatttg tgccctgtta tttgttcttt ccctcgagtg agggatcgac 420
acct 424

<210> 1175
<211> 63
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E8

<400> 1175

cggctgctct gtacaagggg ttcgacttct acgccaccac cgtgctgtgc gttactttcg 60
cgg 63

<210> 1176
<211> 308
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C4

<400> 1176

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cacgatcgac gccagaacgc agcaagcttt cgacggcgtg ggggccggcg ctacggcaca 120
aaagcgggcc cacgccgtgg ccgccgtgct gcaacagcag ctgaacatag acgtgggtccc 180
tgtccaaagc cacgtcttcc ggagaccaga tcacatacct taccgtggcc cccgcatacg 240
agaaagccgc gggcaccgtc agcgcgggcca cgccccgaaa gaagatccgc gccaatgagc 300
ttcccgtt 308

<210> 1177
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C7

<400> 1177

acaagcctct aaactgagtc gtatgactcg tgccttctct tctccctgg catggaggaa 60
gtagctgttt cgcctatgat cgttgccgcc gtagtgctgg acaacaatgg cgctgacgcg 120
gtctcctgca ctgccatccc tagcgtaaca ataagcctag aggagaaaga aaatatcaat 180
gggatgttc ccacgatcac ctgggccgca agcaacgagg atgaggcgtt gttcagtgtc 240
ggagaatcca ccaaggacga tggccatcgc ttgacgatgg aatgctccac tcccgtctcc 300
tccagtagcc cttccactcg caagaagcgc ggggcgttca gcctcttcag ggcgatgttc 360
ctgtccttcg gccggagcga cgacagcatg aagaagacag ac 402

<210> 1178
<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A5

<400> 1178

tcttggtct cccaatagtc cgtaatcctg cagtcctctc ctccaccacc accaccaagc 60
tcaacaacag ccagctcgcg aaaataatga agagccgcag catggcatca tcggccgcgc 120
tcttggtgct agccctcgcg ctagtggcgg ccaccgcccc acaggtagcg gaggcaaaga 180
agaagagagc ggcggagagc ggcgaggcgg cggaggcgaa gaagatccag gacgacttct 240
gtcgcagcgt gtgcgagggc aagaagggga cggacctggt cgtgtgcaag gagtcctgcg 300

cgctctccca gcagtccaac ctggtgctgt acggcaggat ccagtgaag ggcaagtga 360
ccgagcagaa gggcat 376

<210> 1179
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A9

<400> 1179

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agatacccgg cggcggcgat cgatggctcc gcgcagctca tcggcggcga cgtgcctgtg 120
cctcgtcttc gccgcggcca cgctggcgct ggcccacggg gcgcaaggag gaggaccatc 180
ggcatcggcg gcggacctgg acaaggtcac ggccgagacc ttcttggaca tcgagatcga 240
cggcaagcct gcaggccgga tcgtgctggg actgtttggg gacaccgttc ctaaaacagc 300
agagaacttc cgagcacttt gcacagggga taaatgaatt gccaaagtccg gcaagcctct 360
gtggtacaac gggtcgacgt tccaca 386

<210> 1180
<211> 287
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B10

<400> 1180

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cgcgggctgt ccatcgagtt catcgccgtc atgtacgggc tggtcggcgt catgggctac 120
gtcgcgttcg gcgacgccac tcgggagatc atcaccacca gcctcagagc cgggtcgggtg 180
tcggccgccg tgcagctggg gctctgcac atcctcttct tcaccatgcc ggtgatgatg 240
aaccctcgtg aggaggtcgc cgagcgctg ctccagagga agcggtg 287

<210> 1181
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B7

<400> 1181

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tcaaattcaa tttaaggcat tgtcaacctt tttaacaaat aaattgacct tatccccggc 120
aagtacccat attggaatag gacaaaagga gctgatcatt tctttgttgc ttgccattac 180
tgggggcctt acacaacaaa attgcatgat gaattgcgga agaacactat taaagctctc 240
tgcaatgcag atctctctga aggatttttt atccgtggaa aagatgtttc ccttccagaa 300
acattcctta ggtcaccaat acgacctcta acagatattg gaggaatagc acctgcgcag 360
aagacta 367

<210> 1182

<211> 61

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-H10

<400> 1182

ggccgaccca atcctccaca actcgttgct ggagtagtga tcccggccga tcaccattcc 60
a 61

<210> 1183

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A11

<400> 1183

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gccgcggctg aggccacgta caagcatgac ccggtcgagg tcgccaacca acttaaccgt 120
gcagtccaca gatccgtcga gaaggaggac attggcacga ggcgggagat gatgggggacg 180
acgacgagga agtctaagtt cagcggggccg tgcagggcga cgaacccgat cgaccggtgc 240
tggcggtgcc ggcaggactg ggcgacggac cggaagcgcc tggcgcgggtg cgccaagggg 300
ttcgggcgca acaccaccgg cgggctggcc ggcaagttct acgtggtgac ggacggcacc 360

gacgacgacg tggatgaaccc gcgccccggc acgctccggt ggggcgtcat ccagatcgag 420
ccgctgtgga tcaccttcgc caagaaca 448

<210> 1184
<211> 175
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G1

<400> 1184

gccagggccc ggtccagggtc caagcgacgg cgcgtccaag gtcacggaga ttcagggtcac 60
cgtcgccttc agccacttcg gcaacggggt ggtgcagcgg gtgccgcgct ggcgtcacgg 120
gttcttccag gtgggtgagta acgactacac acacgggctc aggtacgcga tcggg 175

<210> 1185
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D4

<400> 1185

gcgtccagcc aaaccggagc acagagcttg tgtgtctggc tgtctccggc cggccggggt 60
tgtcgtacgt cctccaatct gttgacggtc aggcctcta gcttttgctc ggcgttctgg 120
agacagagcg agagcgagag agagagagag agagagaggt acacggagat ggagtgcctg 180
ctgggggctgc tcaagggtgcg ggtgggtgcga ggagtgcacc tggccatctg cgacccgctc 240
accacagca gcgacccta cgctgcctc cgccacggaa agcagaaagt gggatcaagt 300
atcaaatagc gcacgatcaa cccagaatgg aacgaggagc tcaccctgt 349

<210> 1186
<211> 426
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-B9

<400> 1186

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gacgacgaca ccacgagccc caagaagaga gccatcgcg ctgctgatga cgattgcaag 120
 cctgccggtg acgagtcaac gtcgtggaag cgcctcgtag acggtatgag cccgctccgc 180
 ctccgcgggc agctggagta ctacccgccc ccaccgccc caccgcccgt gggccacgcc 240
 gatgtgtacc atgacgtgat cctcccgcgc cgcgtcgagg cacggttcgg cttcgagatc 300
 aaggaggtgg gcatgaccag ccgctacgcg tccgctgagg atctgcacca gatggacagc 360
 gaccaggaag aggggtgctga nggtggcgat gacggtgaca gcagtttgcc acacgcatcg 420
 acatgc 426

<210> 1187
 <211> 404
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-026-Q1-E1-E2
 <400> 1187

ggtcgagaca cgcgtccagt ttaaatacgc agcggccccc tttttttttt tttttttttt 60
 tttttttttt tttttttttt tttttttttt tttttttttt tttttttaat caaacatatc 120
 ttgttgagat tagatattat ttatagagaa gctacgccac agcgacaata gaactggtag 180
 tatggttggc cattggtggt tgtatatact atcgtcgcg cgccgcctcc tcctccgtca 240
 tcgtccgacc ccaccgtcca acggcatggc ggccggccgc gacgacgtca atgcatggtg 300
 tgcatcgag ccaggccagc tgcgtgcccc ctggccagcc agccagcagg gagattaaac 360
 cgccgggccc cgccttgggg ctcaattcaa gctgcggggg caac 404

<210> 1188
 <211> 207
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-026-Q1-E1-E3
 <400> 1188

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 atgatcacgg cctctggacc tcggctatcg cacccaagac gagaagaaaa acgcgaacgc 120
 agcgcgagca aaaatcagac actctgctca cctgtgcagg gcagaaggga ccgacctggt 180

cggtgtgcaag gagtcctgcg cgctctc

207

<210> 1189

<211> 324

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-026-Q1-E1-E4

<400> 1189

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acttcgcccc gaacgagcca ctgtggcagc agaagttttc ccaggcgatg cagaaggtcc 120

ggatgcttga cgtgctaatc ggcgagggca aaggccaggt aaggaagcag tgccgcctgg 180

tgaacgggca ggagaaggag cagaagcagc agcagccacc ggaagagcaa ggagagcaac 240

agccaccgga gctggaggaa gangagcagc aacagccgca tcagccacag cttccatggt 300

tcctgcagag gcagcgcccc cccg 324

<210> 1190

<211> 286

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-E7

<400> 1190

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gtacagaaga tcgtcatccc gccgggcaac tacctgacgg gcgggctgga gctgaagggc 120

ccctgcaagt cctccatcat catccgtctc gacggcaacc tgctcggcac cggcgacctc 180

agcgcgtacc aaaggaactg gatcgagatc gagaacgtcg agaacctgtc catcaacggc 240

cacggcacca tcgacgggca gggaaccctg gtgtggagca agaacc 286

<210> 1191

<211> 336

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-F1

<400> 1191

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aaggggttcac cggcatcgac gatccttacg aaccgccgtc ggactgtgag atagtgatcc 120

agtgtaaagt cggcgactgc ccttcgcctg aatcgatggc tggtcacgtt gtgtcgtacc 180

ttgagacgaa tggtttcttc caggactaga catggaatgc gatcgatgcg tctgatgtgt 240

atatatgtag cagcagccgg agcggcattg ccaaggctgt gtaatctcat ggctgtcttt 300

ctctttaaga ccaaaacaaa caagagatgg cagtgt 336

<210> 1192

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-F11

<400> 1192

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gtggccgtcc aaatccaatc ccaggcgacc atgatctgcg tggacaactc cgagtggatg 120

aggaatgggg actatcccc atcgcgggtc gcggcgcaag cccacgcctt cgccgtcctc 180

tccggcgcca agacggagggc gaacctggag agcacgggtg ggctggtggc catggcgggc 240

aaaggcgtca gcgtgctcgt cccgccaaac aacgacttct gcaaagtcct gtcatgcatg 300

aacgggctgg aaattggtgg tgaagcaaac ttgactgctg cgattcacgt cgctcaattt 360

gcactcaaga atcggcaaga c 381

<210> 1193

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-F2

<400> 1193

gggtcgagca cgcgtccggt tatacaggcg ctcatattgg gccagagcct acaacggaca 60

ggtttgttgt catcacttct ggaccagacg aaagatgcat tcctggaaac accatcgccg 120

tccaagctga catgccatac agtggcctgt catcggttcg aacagcattt ttgtccaagt 180

tcgaatgttc tcagatgccca catccactgt tagagcacgt gaccttcgtg gacactccag 240
gagttttatc aggggagaag cagcggacgc agcgcagcta cgatttcacc ggagtcacgt 300
cgtggtttgc ggccaagtgc gacctcatcc ttctcctgtt tgatccgcat aagcttgaca 360
tcagcgatga g 371

<210> 1194
<211> 315
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-F3

<400> 1194

gggtcgagac acgcgtccag cactacgtgc tgcacaacgc caccgagctc agcagcaacg 60
cgctggccat caccaacagc ctcggcggga tcctgaagaa gatggacctc ggcatgttca 120
gcaaggactc gcgccgccga ctgctgtcgt cggagcaaga tgagaaaggc tggcccgtgt 180
ggatgcggtc gccggagagg aagctgctgg cgtcgggcaa ccagcccaag ccgaacgcga 240
tcgtggccaa ggacggtagc gggcagttca agagcatcca gcaggccgtg gacgccgtgc 300
ccaagggcca tcagg 315

<210> 1195
<211> 299
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-026-Q1-E1-F4

<400> 1195

ggtcgagncc gcgtccaccc acacgtccgg gcggtggcag tggcacacct tcgtcttctt 60
tttgtttgtt ttttttctt cctctttcta cttgattttc atttaacgaa ttggtatcgc 120
tgatgcacca gtttaatttg gtgccctgtt atttgttctt tccctcgagt gagggatcga 180
cacctgtacc attgcttgcc atttgtctgg accagttcaa caattcgatt taaccatcaa 240
aaaaaaagaa agtaacaggc agttcaagaa catcaagcaa ggcgtggaaa cagataacc 299

<210> 1196
<211> 314

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F7

 <400> 1196

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 ggaccagcat ggctgactcg tcggagtatg ttagagctca tagctaagcc aagcacaaga 120
 tgtggactca tcttcaagaa tgattttcat tcgctacttc atcgttaatc gcattttaat 180
 ttgttttgaa ttgtcattgt acgtcgttta tgacataaaa ctgtttattc atcacatata 240
 taattcatgt atcgagatat aaaaaagaaa aaaaaaaaaag agagaaagaa aaaaaaaagg 300
 gcggccctct aaag 314

<210> 1197
 <211> 298
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-G1

 <400> 1197

 acaatactct aatgtgagtc atattataga cctgcgttgt caccacacca tcgagggttg 60
 ggccgccagc aggttcagcc gttcctgttc ttgataaaac gagagaagga tggcagtggt 120
 tcaggagct gtcctattct tgtttctcct cctcgtcgca gcagatgtgg gaaccatcga 180
 tgccaaaatg ggagtagcca tgcccatgca tgccttgata atggagaaag cgaaacagca 240
 ggagacggag aagaaggagg agaaaagcac ggagaaggaa gagagtcaat gcttatcg 298

<210> 1198
 <211> 85
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-026-Q1-E1-C3

 <400> 1198

 cgcgtctaaa gtaagtccta ttacnacta tccaccaccg cgccgctccg gtttaatttc 60
 tcctcgaccg gccagcgcaa ttctg 85

<210> 1199
 <211> 269
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-D1

 <400> 1199

 tgggtgtcct cctcgggtgcg tgccccgagt acgggtgcct cgtgtacgag tacatggagc 60
 acggcagcct cgaggaccgg ctgttcgcgc ggggcggcac gccgccgatc ccgtggggcgc 120
 agcggttccg gatcgcgggc gagatcgga cggcgctgct gttcctgcac cagacaaagc 180
 cggagccgct ggtgcaccgg gacctgaagc cggccaacat cctgctggac cgcaactacg 240
 tgagcaagat cagcgacgct gggctggcg 269

<210> 1200
 <211> 335
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-D2

 <400> 1200

 acgcgtccaa acacacgtcc gcccacgcgt ccggcatctt ccctgtcgtg gatccacatg 60
 aacaaggttg gccctacccc tgctcttttt aaggctgaaa tgccctggtc agcccgaaga 120
 ggaaatctct cggagaaaca aagagtcttc aaaacggtga aaggagggtc ctttatagct 180
 tacttgatgc aatgcagtct ctaacatcgc aagctgttgt tattggtgtg agttgccgct 240
 tgggtgcact cttgattgat gtttcaaaca aaaaagatgt cattcctggt tatgtagtaa 300
 tgatcatgca acaccatata aagcacatgt gtttc 335

<210> 1201
 <211> 226
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-D9

 <400> 1201

 gacccaagcg taagggaagt tccatgtgga acatgtcccc gggttcctat gtgtgggaaa 60

acaggggtgt acttttttta aatgggcaac cccattggta gggaaatcca aggggggtata 120
 tcctttccac gaaaaggatt ggatagatgt atggctatct ttatgttgtg ttctccgacc 180
 acgggaaaga atggtaattg aaaaacactg tgggtgctata ctgagc 226

<210> 1202

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-E1

<400> 1202

gggtcgagac acgcgtctag gccgatgagg ggcactgcct cgctgacatc ggtgacatga 60
 tgacccgcga gttcacggct cagcaggatg tgctgagcac actcgaggcg ctatgcaagc 120
 aagcgcgcga ctccgtcctc ctctctccac gcttgcctc cttccgacac ccctcgaccg 180
 acggcgacgg cgctgacgag ggtacagccg tctccggcgg gcggaagcac gtgtcgttcg 240
 gcgacctgag ctctcgaggag tgggcgtcgt tcctggagag gttcgagcag ctgctgccgg 300
 cggcgctaga agccaagaag cgcgctgggc t 331

<210> 1203

<211> 78

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A3

<400> 1203

aaatctcaag aactacccga aactttggcg acagataact ctgcattaac tgataagttc 60
 aaccaacagg cacatgta 78

<210> 1204

<211> 253

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A5

<400> 1204

gaggaaatcg tcgcaatgct gggcggcggc cacagcatcg gcgtctgcag gtgcttcttc 60

atcgagaccg acgcggcgcc catcgacccc aagtacaaga agacgatcag cgacgcgtgc 120
gacggcaagg actcgggctc cgtecccatg gactccacct cgcccaacga cctggacggg 180
agctacttcg gcctggtgct ggagaagaag atgccgctca ccatcgaccg cctgatgggg 240
atgggcaaga aga 253

<210> 1205
<211> 382
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-026-Q1-E1-B10
<400> 1205

atacacgact ctagaatgac tcgtgggagc cccgtccact ctctgttcgg tcccgcgatg 60
ggcatgttcg catcgggcgc aaagagatac agcaacggca agaattttct ccgcagcgcg 120
ggcgtgtgct gttgttcgcc gtcgcctcc gccagcttg gtggtgtgcg cggcaaggaa 180
gagacatcga cgtcggcgcc agcttttcgcg ccggatagca acaagaaaag gtggaggaag 240
aagaggttct ggagaaagaa gatgaaggcc aggaaggaga tcggcgggct ggtggacctc 300
gtcaacgata tttcggccaa gtcagaggag agcctaaggg ttagcaacca aaacatgccc 360
agcagggcgc tgacgttcag tc 382

<210> 1206
<211> 362
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-026-Q1-E1-B12
<400> 1206

gccgatacaa cactctagaa tgcgtcgtct tagtcgcca cagcgcccga cgtcgagctg 60
ccgcacgcca acttcaccgt ggaccgcctc atccagatgt tcggcgccaa ggggttcacg 120
gtgcaggagc tgggtggcgt gtccggcgcc cacacgttg gcttctccca ctgcaaggag 180
ttcgccgacc gcctctacaa cttccgcagc cagggcgga agccggagcc gttcgacccc 240
agcatgaacc cgtcctacgc cagggggctg caggacgtgt gcaaggacta cctcaaggac 300
cccaccatcg ccgcgttcaa cgacatcatg actcccggca agttcgacaa catgtacttc 360

gt

362

<210> 1207
<211> 309
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-B2

<400> 1207

gggtcgatac aagcctctac actgcgtcct ccgagcaaca actcagccgc cgcaaccgcc 60
acatcagcca tgggcgcctg cgcaaccaag cccaagacgc ttgaggggca ggccccagct 120
gaggccgccg tctccacacc caagggttgcg cccgaggcca ctccaatctc cgttgaggtt 180
gctggctgatg aacaggttagc tgagaaggtg gtggtggagg agccggctgc ggcggccgac 240
gttgagcatc agaaggctaa tgaggtgctc gctccagagg cggccgtcgc cgagccccgac 300
cacaaggag 309

<210> 1208
<211> 298
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-B3

<400> 1208

ggcacgcgtc tacgtacat catgtcaagc aacatactgc tctttgacca tgatgttgcg 60
aagatcgggg acttcgacat ctcaaaccag gccctgaca tggctgcgcg cctccactct 120
actcgcgttc ttggcacctt tggctaccat gcaccagaat atgccatgac tggacagctt 180
agcacgaaga gtgatgtcta cagctttgga gttgtgctgc tggagctttt aaccggtcgc 240
aagccagttg accacacact gccccgtggc cagcaaagcc ttgtgacatg ggctacac 298

<210> 1209
<211> 290
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-C1

<400> 1209

cggtcgagca cgcgtctagc actatgcaat gaactttaca cagtagtccg tgaagttttg 60
 gatgccattc ctccctttga gactacacgg tcaggatgca gtcctgggct cctggcattg 120
 agttccttga ggatatctgt tgagaaagcc aagaatttac tccagtattg ctgagagagt 180
 agcaagcttt acttggtgtg tacagcagaa agcgttctaa caaaatttga gaattcaaga 240
 caaggacttc tggaaagcct tcaccaagta gaagaaacaa ttccggaagc 290

<210> 1210
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-C11

<400> 1210

ctgcggggtc gatacacgcc tctacaatgc gtctcctgat ggttactccg cgcgccttct 60
 ctttctctcc cggacgtcga tcgtgttctt cagcacgggc tagctagctc cctccctccc 120
 agccatggcg acgccggaca acaaggggca cgggcatccg ctgcccagt ttggggagtg 180
 ggacgtgaag aatccggcca cgtccgaggg cttcacgctc atattccaga agggccgcga 240
 cgacaagaag accaccaccg gccctggggc tgggaacgcg cgcgcaggca ttccgccggc 300
 cttcaggaac ggcgggcgcg acggcgggta caggcccgac ttcggcgacg gcaaccagta 360
 cagccgccc aaacggaaga agtgggcctt ctgtggctgc tgaatcgaag ctgcgtg 417

<210> 1211
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-C12

<400> 1211

tacaagactc tacaataatt cgtgcgagca gccacaggca ggcgtcggca ccatgtcttc 60
 tttcacggc acgcaggaca agtgcgcgga gtgcgacaag accgtccact tcacgcacct 120
 cctcacggcc gacggcgtca cctaccataa gacatgcttc aagtgcagcc actgcaaagg 180
 gatcctctcg atgtgcagct actcttccat ggacggtgtg ctgtactgca agaccactt 240
 cgagcagctc ttcaaggaga cggggagctt ctccaagaac ttcacgccag gtggcaagtc 300

ttcagacaag ggtgaactga caagggcccc cagcaagcta tcatctgcgt tttctggtac 360
tcaggataag tgtgcagc 378

<210> 1212
<211> 266
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-G6

<400> 1212

agtgacgtcc gtattaaaag ctgcaagtaa catagtata aggagtttct aaatccaaac 60
tgcgaggact gcgccatttt ggcaagtggc ataaagacaa ggataaggaa gatgataaaa 120
atggggctga ggacggtgaa catgggtcgg ttccgatttc agtcttcatg gttgcaagtg 180
tcctcaagga gaagagagaa aaccagttag aagaatcgag acgactgcat catcgtatca 240
ggatattgaa cgatgtaaat gggaac 266

<210> 1213
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-G8

<400> 1213

acaagcctct atatTTTTTt ttttattttt tttggaccac agttccaccg tccagtgact 60
actctcttat gtactctgat gaatgtctga ctaatgatag atggtgcaat gctgcatagg 120
gcacaaatcc aagaacacct cgtatacaac aacctaataa cgaatcagcc aaaaaaaaaa 180
ttaaccagaa gaccttatta gtcaatcttg aggtcgttgc acgatcaaag attgggcgac 240
tctctttgat tcttaactct ttcttgtag tcaatcttta ggttgacca tccaatgaat 300
gctgacgatg tttatgtacg tggcgtcgtg gcggttaatg gatgcccttg ggcggttggg 360
ccgtcttcgc atgcatgggg gcgaagagat aact 394

<210> 1214
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-H1

<400> 1214

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cctcgcggtt gtatttggtt cctacgcctt cgtctgctgc ttgtcgctcg tcttcgtgta 120
cctcaggggtg cccgagacca aggggttccc gctcgaggtc ataatcgagt tcttcaacgt 180
gggtgccaaa gctcagaagc cggagcagca tgaagaggag gagaaccacg actaaccctg 240
atatatttgg attcattaat aataactgtt ttttctttct ttctttcttt ctttctttct 300
ttctggatta tgagttgaat gaatgatgtc gatcagagag cttgatgacc atcatgttag 360
cgatcccatg aaatatgttt gaggacgcat ttggatgttt ctaaaaaaaaa aaaaaagggt 420
ccggcggctc t 431

<210> 1215

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-H12

<400> 1215

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cgtcttttga aactgattca tgtgagggtc gtgttgagca gaagaggaaa aatattccat 120
cagtctctac agcactacta cttggtgggg tgcttggcct acttgaaacc ctactgcttg 180
ttctctctgc aaaacctatc ttaggctaca tgggtgtaaa accggactct gcgatgatga 240
agcccgcatg gcagtactta gttctcagat ctcttgggtc tcctgctgtt ctgttatctc 300
tggcaatata aggagtcttt cgcggattta aggatacaaa gacgcctcta tacgcaactg 360
tggctggaga tgcgatcaat atagttttgg atccaataat tatgtttggg ttc 413

<210> 1216

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-H3

<400> 1216

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ccaaggcaat ccgccgccga cgtaccacca ccaccgcagg agcgagatgg agatgaagag 120
gatectcttc gccgtcctcg tcgtcatcgc cgcttcggcc accgcagtgc tggcctccac 180
cgaggccgcc gccgcgggcg ccccaactgc ctccgagtcg tccgccgagg ctcccgttgg 240
cgctggcgct ggcgtgccc ctggcgccgc cgccgcgggg ccctccgcca gcagcggcgc 300
gcccgccttc gccgccgcgc ccgccgcgt cctcttctcc ctctcgcct actacctca 360
ctaagcctgt gcgtgc 376

<210> 1217
<211> 219
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-H5

<400> 1217

ataaaaatgg agacaacaac aaaactcccg tggagcccg ccggctcctt cctcctcgtc 60
tccgcggcgt tcctggcgtc cgccgccgcg tctggcgta acatcggcca gtgcgacgac 120
cacttgcaag agcggaagga gctcggcgag gcgtctgcca gggaggcgta caggcccgac 180
ccgtacaacg tcaccaacag cttcaacgcc gccgtccac 219

<210> 1218
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-H8

<400> 1218

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cctgcagctg tcattcgtgg cacgaatgga tccgggggca tcaactgtga gaatacaggg 120
caatcagtca tcattgggat cgacgacgag cccatgactc ccgggcagtg taacctggtg 180
gtgagaaggc tgcgcgacta cctgctcgaa caggggatgt gatgacaacc ctttctcctg 240
gaatgcatgt tgatgatgtt gctgggtcca acttcgtatt cagtaataac aacacagcta 300
agagcctcct acctacccta attgcttgag cggtcttctg ccgcgccata agataccaac 360

tggtgcactg ggaaa

375

<210> 1219
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A10

<400> 1219

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tgagagcctt gttcctcctg gtcctcttct gcatcgtgca tggtgagaag gaagagtcaa 120
agggcacga tgcgaaagcg tccgggcctg gtgggtcctt cgacatcacc aagttgggcg 180
cctccggcaa tggcaagaca gacagcacga aggctgtgca ggaggcatgg gcatcggcgt 240
gcggcgccac tgggaagcag acaatcctca taccgaagg cgacttcctt gtcggacaac 300
tcaacttcac aggcccttgc aaggcgacg tgaccatcca ggtggatggc aatctgctgg 360
cgaccacgga cctaagccag 380

<210> 1220
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-G4

<400> 1220

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gggaattacg gtccggattg gccccacaac cgccctttcg gaattcaaac aacaacgccc 120
gccggttccc cgccgcccgc cgcatgaatc gattaattat tatatatata tatatgcatg 180
ctatctacta tgatcgatcg cttctcgacc ttcttgcac gatctgcatg catattataa 240
tttatattat attgatgcca cgccgcatgc aggtctttcc aaggcgtacg tactatatca 300
aattatttta atttccttac atgtatatgt atgtgctgct gttggatagc tacgtatata 360
tatatgttcc aaggtttccc ggttccggcc ttgttacatg catgaag 407

<210> 1221
<211> 398
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-F12

<400> 1221

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gccgcctagt ccgcctcacc ttcgcgcgcc cgccccctcat catgccctcc tgcttcctat 120

gggactacat caaggtgatg ggctctgatac atatccagga gaaagctgag ctgctatacg 180

ctttgattaa cgggaggcaa ctctgtactc ttccaaaatt gaccagccg acgcttataa 240

tctggggaga gcaagatcgg gtgttcccaa tggagctggc tcacagattg aatcggcatc 300

tagaggggaa ttctcgatta gttgtcataa aaaatgctgg gcacgcggtc aatatcgaga 360

agcccaggga agtgtgccgg agcatcattg agttcttc 398

<210> 1222

<211> 384

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-F2

<400> 1222

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taataacatg tccaacagt taatatacag aatccaacca ataaaaaat gtcaggaaaa 120

aaaagaaaag aaaagtaatt caagggaac agacatctcc aggtacgagc tgtgcctcca 180

gccctccaca gnacatccga aatgcaggtc aagatctacg ctgcgcgcatc caaaccaaat 240

cccttctggt cttctggagg ttctggtcgt gggctcccca ccgacaatga ggctgcgccg 300

gaatcacgga gcggagcgga gatcgccgcg ccggaatccg gacgaatcca tcagatggtc 360

cggccgattc gcgcgagctc cttt 384

<210> 1223

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-F3

<400> 1223

actcgtcggc ccacgcgtcc ggccacatca catacaggaa agcaagcaag aatcatcgga 60
 ataatggccc gtgcatgctt gttcctcgtc gtgctcctcc tggccgccat cgcggtggca 120
 ccgttcgcgg gcgcgcgacg cgtggacgtt gtggagggtta ggtccatggc atccgccgat 180
 gcaccggagg cggcgggcca tgctcccgtt cctagccccg actccgcctc atccccagac 240
 tcgtcatcgg aggcgccttc tagcagcagt tctccgact agacgcaaaa acctcttcac 300
 tctctggaat aactaacagt atatacgtt caccctgatg atatagaaac atgtacgtgc 360
 atcagtgtat ggaatgcgag tggcaaacac atggaatgtg cttgccctaa tattgggtta 419

<210> 1224

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-G10

<400> 1224

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 ctgcgcgagg aacgggcctc agtgctcgcc gccagcagca aggtctctga tgaggcggcg 120
 gcggcggtta ccgcggtgcc gcctgcaggt gccaaacact ccagcagcaa cgatgccccg 180
 gacggcgcca tgggcaacgt gcaggacgag ccgcggcagc agcgccacga tgactatcac 240
 caccctcgaga tcgtccccga gaagatcata cagcaggacg cggtgcccgt cggtgctgctg 300
 gagaaggaga ctgccgccgc cgccgcaacc t 331

<210> 1225

<211> 415

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-G11

<400> 1225

gtcgacacac gcctctacat ctattcgtgg cagccctcac tctttagacn gtgaggagga 60
 gcacaattct gatcagcatc tggcagcaag tgtcactgag angttaatan acctgttggc 120
 tcagcagcaa gaagagcttc gtgcgctgca aaggaaacac aaggcggaca tagaggagat 180

gctgaaaatc gtacctgcgg aggatcggga agagacctta actctatgcc gcttgaaggc 240
 ggaacagaaa aacagagccg ccgaacctta gataaactgt ctcatgtgca tgttcctctg 300
 tgtgctgtta gatttataca tactcacacc aaggagttgt tgtttacact ttacagccgt 360
 tgtttgtgcaa aagttggaca tctgttgtgc agaagataag tctgaagcct ttttc 415

<210> 1226
 <211> 341
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-G12

<400> 1226

cgcccacgcg tcggtctcac cctccctccc tcacacagat aataaggaaa ggtcccgccc 60
 ttttcctccg acatccacag gggggagggg aaaacacgtg cattcacccg gcggcaataa 120
 tggcctcggt tccggtccg gcgacgacga ccgccgccgt aatcctatgc ctatgcgtcg 180
 tcctctcctg tgccgcgggt gacgaccca acctccccga ctacgtcatc cagggccgcg 240
 tgtactgcga cacctgccgc gccgggttcg tgaccaacgt caccgagtac atcgcgggcg 300
 ccaagggtgag gctggagtgc angcacttcg gcaccggcaa g 341

<210> 1227
 <211> 436
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-G2

<400> 1227

gccgaccaac ccgtccattc acaacatgcg aagaacaagg tccattacat aaaattaaag 60
 ttccaaaacc aaaactgaaa ggactgccca attttgcaa ttggaataag gacaaggata 120
 aggaaaatga taaaaatggg gctgaggacn gtgaagatgg tccggttccg atttcagtct 180
 tcatggttgc aagtgtcctc aaggagaaga gagaaaagct gttacaagaa gccagaggac 240
 tggatgatct tatcaggata ttgaacgatg taaatgggaa cttagatgct aagaaagctt 300
 gcgctggagc attgaaactt cacaaaaaat acctgaaaaa ggtacaagca aagaaacctt 360

aaacgtgcc a tggaacacac gttcccaatg gggctaacct tacaatttca catacacgac 420
aatttccaca cacaac 436

<210> 1228
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-F10

<400> 1228

ggtcgaggcc agcctctaca gtcactcggg tcacggagat gcacgcgcgc cggccccgtcc 60
tgcagggccg caccgaggtc gagcagatcc acaggatctt caagctctgt ggctcgccgc 120
gcgaagactt ctggcgccgc ttggggctct cccacggcgc cgtcttccgc ccgcagcaac 180
cttacccgaa ccgcctccgg gacaccttcg ccgcgtccat gcccgaccac acgttccgcc 240
tcgtcgccac gtcctcgcgc ctgcagctg ccggccgtgg caccgccgc gccgcctcg 300
acgccgagta cttcacgacg gcgccatacg cgtgcgatcc ggagagcctg cccaagtacg 360
cgcccaaca 369

<210> 1229
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-D7

<400> 1229

actcgtcggc cgacgcacgc gaccagcacc aatgaccttc ggcgccccgtt caggatccac 60
atcttcccga gcgagttctt ggttgacctc ttcccccttc ggaccacctc caaggctctt 120
ggtgtagctt gccactctca ccaatcaagt tttcatgtct gatctcgaca ttcagatccc 180
aactgccttc gatcccttcg ctgaggccaa tgctggggac tctggtgcgg cagcagggtc 240
aaaggactac gttcacgtgc gcatccagca gcgtaatggt cgcaagagcc tgactaccgt 300
ccagggattg aagaaggagt tcagctacag caagatcctc aaagatctca agaaagagtt 360
ctgctgcaat ggtacagtgg tccaggaccc agaacttggc caggtcattc agctccaagg 420
tgatcagagg aag 433

<210> 1230
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-E11

 <400> 1230

 aatactctat actgacgtcg tattaactg gtgctttcag atatttcagg ctcttgctta 60
 catgcatcag aggggctact ttcacgtga cctcaaacct gagaatctgt tagttagcaa 120
 agatgtcata aagctagcag actttggtct tgcaaggga gtttcatcat tgccgccata 180
 tacagaatat gtctcaactc gctggtatcg ggcaccagaa gtattgctcc agtcatctgc 240
 ttatgattct gcagttgata tgtgggcaat gggtgccata atggctgagt tgttgacact 300
 ccatcctctc ttctctgtaa ccagtgaagc tgatgagatt cacaagatat gcaatgtcat 360
 cggtagtcca gatgagcaat cttggcctca aggattgtca cttgcagaag caatgaagta 420
 tc 422

<210> 1231
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-E12

 <400> 1231

 ggtcgatgcc agcctctaca ggcactcgca ctatggacgg ccaggggacc gccgtttata 60
 gcaagagcaa gaccgacaac gtgaaggcga tgcccaacac actggtgctg ttacacgtga 120
 tcaacgccac tgtcgccgga atcaaaactac tcaactccaa gttcttccac atcaacatcg 180
 acaactcaga gagcatcacc gtgaaggacg tgaacgtcac cgcgcccgcc gacgttgaga 240
 acacggacgg cgtccacgtc ggaggctcct ccaagatcag catcctcaac tcgaccatcg 300
 gcaccggcga cgactgcgtc tcgattgggc ccgggtgcaa cggcgtcttg gtggacagca 360
 tcacctgcgg ccccgggcaa ggcacacgcg tcngctgcct aagccgctac aagga 415

<210> 1232
 <211> 425

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-E2

 <400> 1232

 ctctagagaa agtcgtcaga ttcgcggtgg tgttcccgga gcaaaggtac gagatcgtga 60
 accggcggaa ggaccggaac acatctgcgg cattaccggg acggcgtgaa cgacgcgccc 120
 gcgctgaaaa aggcggacat cggcatcgcg gtggacgacg cgacggacgc ggccccggagc 180
 gcgtcggaca tcgtgctgac ggagccccggg ctgagcgtga tcgtgagcgc cgtgctcacc 240
 agccgcgcca tcttccagcg catgaagaac tacaccatct acgccgtgtc catcaccatc 300
 cgcacgtgac tgggcttctt gctcgtcgcg ctggctctgga agttcgactt cgcgcccttc 360
 atggtgctca tcattgccat cctcaaccaa cggaacatca tgaccatctc caaggaccgc 420
 gtgaa 425

<210> 1233
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-E4

 <400> 1233

 aagcctctag atcgagtctt gctacgccac ggcctctctt gctatcgtg ctggtcgccc 60
 tgctagcggg ggccgcggat gtcgccaacg ccggccacgc caagcccctg acgcctggcg 120
 ggcgcggtgt acaccacaac cacggcaagt tcacggccgg gccgtggaaa cccgcccacg 180
 cgaccttcta cggcggggcg gacgggtccg gcaccacggc gggcgcgctg ggggtacaagg 240
 acacgcgcgc gcaggggtat ggcgtgcaga cgggtggccgt gagcacggtg ctgttcggcg 300
 acggcgcggc ctgcggcggg tgctacgagg tgcgtgcgt ggacagcccc agcgggtgca 360
 agcccagcgc gggggcgctg gtgg 384

<210> 1234
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-E8

<400> 1234

ctcgcgggtc gatacaagcc tctacacaga cgtcgtgtga agagagaggc agaggcaggc 60
ggccggtgca tgcattgcccc gccctccctc cgtgcgcccc cgaagacctc ctccgcccc 120
ggcgcgggtga gctcgtgacc gcccgagcgg cacccgcctc tgcggtttga agctcgtctg 180
aagcactcca attaaacaaa agaagccacc atggcggttca attctccgga ggagatatgg 240
ggggacatct aactgtgtaa aatatcggtg gaggaggtgt tcacgacact gaaatgcgac 300
cgcaaggggc tgtctagcac agagggcgag aaccgggtca tgacgttcgg gcccaacaag 360
ctggaggaga agaaggagaa caacctctc aagttctctg gcttcatgtg gaacccgctc 420
tcgtgggtc 429

<210> 1235

<211> 427

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-E9

<400> 1235

acaatactct atactgacgt cgtagtaagc gggtaggtcgg cgtctcacta tccaccaccg 60
cgccgctccg gtttaatttc tctcgaccg gccagcgcaa ttctgtgcct cgatcgatcg 120
gtcgtaaggc aagtgcgcaa gctatatata tatatatata tatatatata taggagattc 180
ttcgagcgag ctagtagcga gatgggttcc gccgtcctct ttactgcat ctgcatcgcc 240
gccgtcgtcg cattgtcgtc gtccatggc gccgtcgggt ccgccgcccc gggggaaaac 300
cccaagttca tctcgcgag cgcccttgag tgctccgcta acgtaacgga aatagcaaag 360
gcgcgcaagc tgatcgatgt caatggccac gggctgtgcc cngtgcggtt cgaccacacg 420
cgcgga 427

<210> 1236

<211> 396

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-C1

<400> 1236

cacgcctcca cagcaatcca tcctgagtgc tgtacggcag gatccagtgc acaggcaagt 60
gcaccgagca gaagggcatc acggcgccgg ccatgaaggt ctgccaggan gagtgcgaca 120
aggcgtagct ggtgaaggcg gccgaggtca ccaaggcctg cagcgtcacc tgcgccaagg 180
agaagaaccc gcgcctcagc gagaactgca agaggtcctg caccctcct ctttcttgaa 240
gcgaagcccc ttgaaatgaa tgaaccatgc atgcatgcat gtatgcatgc gccgggggtga 300
cgtggcgttc agtcaagcg ctgagcgagt ctatactac gtcgtcaccg gctggccacg 360
catgcgataa ccatctgata tggacggaac tatata 396

<210> 1237

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C10

<400> 1237

cctagactga gtcgtatgag ttctgttccg ttcggaagat gttcttggag agcttccggg 60
tggagagccc gcgggtgaag tacggcgacg gcgagatcca gtcggagtag cgctacgaca 120
ccaccgaagt cgtcccgcgg gggaatggcg gcggcgcggg gtgggtggtg cgcccaaagt 180
ccgtcaccta caacttcaag accagcacca acgtcccaaa gctgggggtg atgctcgtcg 240
gatggggcgg caacaacggg acgacgtca cggccggggg gatcgccaac aggggaagga 300
tttcgtggga gacgaaagag aaggttcaca aggccaacta cttcggctcc ctga 354

<210> 1238

<211> 268

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C11

<400> 1238

gcgtccacgc aaagcctccc cgtgtcccct ctttcccgc cggcaccgtc aacctcggcg 60
gtggaaacag aacagaccca ccaaccatgg caaactcggc gtcgggaatg gccttgaccg 120
acaattgcaa gctcaatttc aagaagctca ggtcaaagcg aagcttccgg ttcacacgt 180

tcaagatcaa cgagcagacg cagcaggtgg tggtagacac gctggggcag cggggccaca 240
cctaagacga attcaccggc tccatgcc 268

<210> 1239
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C12

<400> 1239

cggtcgacg caagcctcta catggattcc tgcgacacag cctctcctgc tgtcgtgct 60
ggtcgccgtg ctagcggtag ccgccgatgt cgccaacgcc ggccacgcca agccccctgac 120
gcctggcggg cgcgtggtac accacaacca cggcaagttc acggccgggc cgtggaaacc 180
cgccacgcg accttctacg gggggcggga cgggtccggc accacggcgg gcgcgtgcgg 240
gtacaaggac acgcgcgcgc aggggtatgg cgtgcagacg gtggccgtga gcacggtgct 300
gttcggtgac ggcgcggcct ggggcgggtg ctacgaggtg cgtcgcgtgg acagccctag 360
cgggtgcaag ccagcgcgg cgacactggt ggtgacggcg accgacctgt gcccggccaa 420
cga 423

<210> 1240
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C2

<400> 1240

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cctcaagctc gccgagtact tcaacgtcac cgacgggggtg ttcagctaca accagatggg 120
cgacgtgcc cccgccgtta acgggccact ccatgtcatc cccaacgtca tcaccgccga 180
gttcgggacc ttcacgaga tcgtcttcga gaaccccgag aagagcatag actccctcca 240
cctcgacggc tacgccttct tcggcgtcgg gatggggcct gggacgtggt cgccggagat 300
gaggaagacg tacaacctac tggacacggt gagccggcac acgatccagg tgtaccgcg 360
gtcatggacg gcgatcatgc tgacattcga caacgcgggc atgtggagcc gtcgggtcaa 420

cgtctgggag cggactacc tcgggga

447

<210> 1241

<211> 328

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-C3

<400> 1241

gaggtcaaaa ccttgggatt tgtgcggcgg gacctttaa ccggtcgcaa gccgtttgac 60

cacaaactgc cccgtgggca gcagagcctt gtgacatggg ctacaccgag gcttaatgaa 120

gacaaggtga ggcaatgcgt cgattccagg ctcgagacg aatacctcca aaggctgtag 180

ccaagatggc tgctgtggcc gccctctgcg tgcaatacga ggggtaattc cgtcncaaca 240

tgagcatcgt cgtcaaggct ctgaaccct tgctgcacag cgggtctggc aaccgcccta 300

ctgcctcgtc ggctccac gctgccgc 328

<210> 1242

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C4

<400> 1242

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ggagcaggcg ggcgccgaa ggtactggtg ccacatgtgc gccgcggccg ttagccccgc 120

ggagggcgaa gtggagatga agtgcccggt ctgccacagc ggcttcctcg aggagatgga 180

gaccgccccg ggggccgga cgcagcagc tgacggcgac ggcgacggcg cgggtggctca 240

ggtgcacccc ggcgccgacc gcccgagctc catctgggcg cacgctatcc tcagcacggt 300

cgacagctcc gcccgtcgcc gccgcaaccg gcggcagcag gaggccgcca gcgacgtcta 360

cgactggaac gaccccgagt tctcgtcgc cggcgggcgc gtcaccgcgt tc 412

<210> 1243

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C5

<400> 1243

gggccgaccc acgcgtccag accgactggc cggacaaccc aacccccacca ccaccagtcc 60

ccgcggcccc cgctcaggaa gaagaaggga taggagacgg agacggagac ggagccggtg 120

gtcgcaagga tggccggggg catgcaggcg gcggacgcgg cgggccggct gagcgcgctg 180

ctctcgctgc tcgcgtgcg cgggtcctc gccgtgctcc agccgctggc cctgctcctg 240

ctcctgccct tccggtggcg cgcgcggccg gccggggccg tggccgcccg cgtggcgctc 300

gatgccgcca cggcctccgc gccggggggc agcgggagga acgtgaatgc gtcacgctcg 360

tcgtcggtgg ttctgcgggt gccggccggg tcccccat 398

<210> 1244

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C8

<400> 1244

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gcgcggcgtc ggccgccaac ggggccgggc cccggcgggc ggggtgggcg cgggcgcgga 120

tgcggcggtg cagcgaggcg tccacctcgg gtctgccgcc gccgccgccg ccgccgcagg 180

aggcggcgga gtcgtcgtcc gggggcagga ggcgaggcg caaggtggcg ccggagccca 240

aggagccggc ggaggagggg accgccgcgc tgccgccgat gcccggtcgc cccagcttca 300

ggtactactg ccagaagaag acggcggccg tcgacaggat cgtggccgac gccgacgccg 360

ccgacgccga tgactccgtc agggtcagag ccacggtgcc tcacctgaac aacagggtgca 420

aatcacggc gaccaaggca cagattcta 450

<210> 1245

<211> 360

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-D1

<400> 1245

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ggttacatcc gtatggagag gaacgttaac gccagcactg ggaagtgcgg gatcgcgatg 120
atggcgctcct acccgacgaa gaagggcgcg aaccctccca ggccgtctcc aaccccgcca 180
acaccgccgg ctgcccctga caatgtctgc gacgagaact tctcgtgctc cgcgggcagc 240
acctgctgct gcgcgtttgg cttcaggaac gtctgcttgg tctggggctg ctgcnctgctc 300
gagggcgcca nctgctgcaa ggatcacgcn agctgctgcc cgccgggcta ccctgtctgc 360

<210> 1246

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-D10

<400> 1246

gggtcgagcc agcgtctaata cccagtcgcg tgcataatata tattcctgcc aagataaagg 60
taatggagtc gtcacgcagg ttccagccgg ccgtcctcct gcttctcctg ctcatgtgtg 120
ccaccgatat ggcacaggca agggaaatgcg agaagtacag tgagcgattt gttggggcat 180
gcatgatcgc agacaactgc gccaatgtgt gccgcggtga gggcttcttg gccggcaggt 240
gcagcacctt ccgccgccgc tgcattctgca ctaggcagtg ctaaacaaga tcgctcgatc 300
gcttgccatg catcgacaac ctattcttaa taacgttcat tatctcgttc ttatttatga 360
cgaatgtcat gtatgttctg gtgactgtca tgtatattct gatgactgtc aagta 415

<210> 1247

<211> 426

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-B9

<400> 1247

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tcctcctcct cctcctctct ccaacacccc atccatcagc gctgccctcc gcattgctct 120

tgatcccatc cagtacatcg attctcccc caagatcaaa ggccggagga ggaagaaagg 180
 ttanggagtc ggccatggga tgcttttcat gctgctgtgt ggcagatgac gacaacgttg 240
 gcaggaggaa gaagcatgac gatccctatg ttcctatccc tgctcatgtt tataattttg 300
 gacctagccg gttcccagcc ccaacccctg tcattctccac tggcagagct cagccaattg 360
 cagtaccggc cattcatctg ggagagctga aggaaattac anaaaacttc agcagtgatg 420
 ccctca 426

<210> 1248
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-A12

<400> 1248

agtgactcgt gctacgccac gacctctcct attgccgctg ctggtcgcca tgctagcggg 60
 ggtcgccgat gtcgccaacg cgggccacgc caagcccctg acgcctggcg ggcgcgtggg 120
 acacgacaac cacggcaagt tcacggccgg gccgtggaaa cctgcccacg cgaccttcta 180
 cggcggggcg gacgggtccg gcaccacggc gggcgcgtgc ggggtacaagg acacgcgcga 240
 gcaggggtac ggcgtgcaga cgggtggctgt gagcacgggtg ttgtttggcg atggcgcggc 300
 ctgcggcggg tgctacgagg tgcgggtgcgt ggacagcccc agcgggtgca agcccgcgc 360
 ggcggcgctg gtggtgacgg cgaacgacct gtgccccccc a 401

<210> 1249
 <211> 125
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-A2

<400> 1249

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 gcgcgggtta acgcctctcc cgattcgaag gcctcgctc cgccgggggg ccgggccaac 120
 ccgga 125

<210> 1250

<211> 317
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-A4

 <400> 1250

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 aaccttcgcc ggcaaaagca tggcaatggc ttaccgtgtc ctggagggtca ccctgggtgtc 120
 ggaaaatgac ctcaaaaaag tgtcgctctt ctcccgact cgcactctacg ccgtgggttc 180
 catctccgga ttcgacctcc gcatcccttc caacagcacc caagcaggac acagcaacgg 240
 ctgcaacccc tgctggaaac ccgtggtaca cttecccatc ccggctgccg ctgacaccgg 300
 cgggctcgca ctccacg 317

<210> 1251
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-A5

 <400> 1251

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 ctctcgacc ggccagcgca attctgtggc tcgatcgatc ggtcggtcgt aaggcaagtg 120
 agcaagctat atatatatat aggagattct tcgagcgagc tagtagcgag atgggttccg 180
 ccgtcctctt ttactgcac tgcacgcgcg tcgtcgtcgc attgtcgtcg tccatgggtcg 240
 ccgtcggggc cgccgccccg ggggaaaccc ccaagttcat ctcggcgagc gcccttgagt 300
 gctccgctaa cgtaacggaa atagcaaagg cgcgcaagct gatcgatgtc catggccacg 360
 ggctgtgccc ggtgcggttc gaccacacgc gcggga 396

<210> 1252
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-A6

 <400> 1252

gttgcaagac tctagactga gtcggttgaga tcgagttggt tcactgcacg agcacatcct 60
 ccggcgacca ccggcctccc tctccgtcct ctagecgaccg accaacgcgt cgagcgaaga 120
 tgtcgtggca gacgtacgtg gacgagcacc tgatgtgcga gatcgagggc caccacctca 180
 cgtcggcggc catcgtcggc caccgacggc ccacctgggc tcagagcacc gcattccccg 240
 agttcaagcc cgaggagatg gctgccatca tgaaggattt cgacgagccg gggcacctcg 300
 ccccgaccgg cctgatactg ggaggcacca agtacatggt catccaaggc gaacctggag 360
 ctgtcatccg tggcaagaag ggatccgggg gcatactgt gaag 404

<210> 1253

<211> 397

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-A9

<400> 1253

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 tgcaacgaag cctaagacgc ttgaggggaa agccccagct gaggccacca tctccacacc 120
 caaggttgca cctgagacca ctaccatcca cattgangtt gcggcaaaac atgcagtagt 180
 tgagaagggtg gaggaggaca aggaggaggc actaacagtg gcggcgaaac aagagccagc 240
 agccaccatt gagcctcagc agattgctag tgaggtgacc acttcggaag tggcggtcgt 300
 cgttgtcgag cctgagaaca aagaggaaga ggaagttgtg gagaagaccg tcatcgagaa 360
 ngagaagcca tcagcagtc atgcagagga aaatatt 397

<210> 1254

<211> 305

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-B1

<400> 1254

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 ccaccatggc atcatagtc gctcccattg gagctagccc tcgcgctagt ggcgccacc 120
 gccccacaag tagcggaggc aaagaagaag atacggcaga gagcggcgag gcggccgatg 180

cgaagaagat ccaagacgac ttctgctcga cgctgtgcga gggcaagaag gggacggacc 240
 tggtcgtgtg caaggagtcc tgcgcgtctc cccagcagtc caacctggtg ctgtacggca 300
 ggatc 305

<210> 1255
 <211> 425
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-B10

<400> 1255

gggtcgacac acgcctctac agtcactcgt acaagcatgc atgcatgtga caacctctcc 60
 ccctccctgt ccctctgtat ctgcaactgc aagcaaggaa attaattaaa agaaaatcgg 120
 cgccatggcg gcaacgacga cggggatgca gatgatgcag gcggcggcgt tgctgctgtg 180
 cttggttgtg ttggcggcgt ctacgcgggt cgcgctgggc aactgccgcg acgactgcat 240
 ggctgcatgc aacggctgga ccatcgtctg ccagctctcc tgtgccagcg catgctacgg 300
 agaagtcggg atcacaacct taggtacgtc ggctgtatta gcgaaagcag aagcgctgc 360
 atcagcacca caagcagcac aagagcgaag cgccgccgcc ggctgttccg cgctcagang 420
 gttca 425

<210> 1256
 <211> 291
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-B2

<400> 1256

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 ccgccgacga cgccaacgcc atgcccacca tctgacccc cgtggcgcat accccgctgg 120
 ggtccttcga cggcgacaag cgggcctctg acgacgacgc cgtcgacgac gacgaggacg 180
 ccgccccctgt cggcgcgccc aacggggcca ccatgactga gccagggac gacgtccccg 240
 ccccgccccg ggccgaagca accgcgggcg gcgccgccgc cagcaacgcg c 291

<210> 1257
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-B3

<400> 1257

 cgcgagaca gctccgaaca ctcagtgtc ttgcccaca cctggcccag acagatatgc 60
 agatcacgtc cccttcacac tgcagggcc tgtcacggat caagtgccct gggcttcctc 120
 acgttgtcaa caacgactac acgcactggc tcatgtacgc cattggcggc ggcgacgcgc 180
 caaccatcat cagccagggc aaccgctaca tagcaccacc aaacatcgcc gccaaagtga 240
 tcaccaagca ctacgcggaa gaaggcgtgt ggaagaactg ggtgtggcac acggaggacg 300
 acctgttcat gaacggcgcc atcttcaatc cgtccggcgg cggccccaag caggtcgacn 360
 acaacgagtg ggtaaagccc aagccaggaa acta 394

<210> 1258
 <211> 443
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-B4

<400> 1258

 cgacacaacc ctctagatcg cctcttagca cgggccgttg atgccaaacc tcctcaaacc 60
 aaacccaaac aacaggatta acaattcaaa aacctggcca agcacccttg gttcaaaaag 120
 gggtaaaggc cggccgtcat gctggcacac ccgcacggct caagcaccct caaggatgtc 180
 caggtcgcct tcagcaacgc cgaccacaag gacagcagca gcaaggtgga acagccggcg 240
 gacagtcct tgaagccggc gagcctgaac gcgttcgaca tcattctcca ctccagaggg 300
 ttcgacctgt caagcctgtt cgaggtggac caagagcaga aggccagcaa ctgcggttc 360
 atgaccaga agccggcgtc ggcgatagtg tcaaagctgg agcagatcgc tgagacagag 420
 cccctcatgg tgaaaaaaca gga 443

<210> 1259
 <211> 215

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-B8

 <400> 1259

 ctgcggggtc gacacacgcc tccacaatga atcagtgtat tatgctcacc aatgatagtt 60
 ctactaaagg atgaagcaga tgccttttgg tgctttgaga aattgatgcg tagattgcga 120
 ggaaatttca aatgcacaga tcaatctgtg ggagtatcca accaacttca acatcttgca 180
 tctattattc aggttcttga cccaaagcta catga 215

<210> 1260
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-G6

 <400> 1260

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 tagctaccga cgaagacaag gcgggcaatg gccaaaggcg ccttgccgct tccgtcgctg 120
 ctgcctctcg ccgccttctt ctccaccac ccctgctgca cggcgagagg ccgcgccgaa 180
 aacatctcgg aggtcgaggg cgcggtccgc gcccgcgctt ccgagctgct ccgcgacgcc 240
 accagccagc tcgtcgacct gncctcncg gccaacctct ccggcgcggy cgtccggggc 300
 tcggccctca gcgtagcgag caacgcgtc tgggcccggc gcgtaaacac caccggcttc 360
 accgtcccgc cgcggtcgt gccggccccg ttcgcgcgcc gcctcgccat cgtcttcgag 420
 ctcttcgtgg 430

<210> 1261
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-G7

 <400> 1261

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gagtgcgaaa gacgaggtgg ttcaagatct cgtcgacggc ctggagtcga tcttccagga 120
gtacatcttc tttgtggcgt cttgcggttc gaaacagaac tacctccctc cgctgccgcc 180
gctgacgagg tgcaaccaag actcgggctt cttccgactg tggaagaagg cggcgctgcc 240
gacgtgccag gcgccgccgg atgccacccc gcgcggcggc ggcggttcgc accacgtcnc 300
gcggccgtcc atcagccggg gcacgcagcg gctctacgtc cgctcaaca cgctccacta 360
cgtgctgacc cacctggagg ccctcgacag ctcgctgtcg tctctg 406

<210> 1262
<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-024-Q1-E1-G8

<400> 1262

tcgtgctacc ctcgtcgtcg tctcaactcac cccgccttca cgctccctc accaaataag 60
gtccccccct tttccgacat tcacaggggg gacaggaaat cagcggccat ggctcgtatt 120
ccggcgacga ccttcgccgt catcttatcc gtctcttctt gtgccgcggc tggcaccgcc 180
gtcgacaacg acctccccga ctacgtcacc cagggccgcg tctattgcga cacctgccgc 240
gccgggttcg tgaccaatgt caccgagtac atcgcggggc ccaaggtgag gctggagtgc 300
aagcacttcg gcaccggcaa gctcgagcgc tccatcgacg gggtgaccga cgggaacggc 360
acgtacacga tcgagctcna agacagccac gaggaggaca tctgcgaggt ggtcttgggtg 420
gagagcccgc gcaaggac 438

<210> 1263
<211> 443
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-024-Q1-E1-H1

<400> 1263

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ggcggtgtc cctccctctt cgtccccag cgacgcaggc aggcgcgcgc gcggccatga 120

agggggggcgg tgccatgagg ccgtcgcta tgttctacgt ccacgaggcg gacgtcgtec 180
 agatccacca cttcctcgag gagtgtctcc tctgcgcaa atcgctctcc ggcgacatct 240
 tcatgtacag gggtgacacg ccgttctgca gcgaggagtg caggagagcag cagatcgagg 300
 tggacagggc gaagcaccgg cggaagaagc ggcggggcgc gcacgcgctg tccgcacgca 360
 gcaggagca ccggcaccag cagcagctgc agcagcnnac accacagcag cagcaaccgc 420
 agccgcggaa tgccggcatg gac 443

<210> 1264
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-H10

<400> 1264
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 ctttcgacga ggccatcgca agagccgact tcatctccct ccacatgccg ctgataccga 120
 cgacgtccaa gatcttcaac gacgagtcct tcgcaaagat gaagaatggg gtccggatca 180
 tcaacgtggc caggggtgga gtgatcgacg aagacgtctt ggtcagggcg cttgactccg 240
 gcaaagtgtc tcaggcggct cttgatgtct tcaccgtgga gccccgccc aaggacagca 300
 agctgggtgtt gcatgagaat gtcactgtaa cccccacct tggagctagt actgtcgagg 360
 ctcaggaagg cgtcgctatc gag 383

<210> 1265
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-H11

<400> 1265
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 ctctgtatct gcaactgcaa gcaaggaaat taattaaaag aagatcggcg ccatggcggc 120
 aacgacgacg gggatgcaga tgatgcaggc gcagcaggcg gcggcggttc tgctgtgctt 180
 ggttgtgttg gcggcgtcta cgcgggtcgc gctgggcaac tgccgcgacg actgcatggc 240

tgcatgcaac ggctggacca tegtctgcca gctctcctgt gccagcgcat gctacggaga 300
 agtcgggatc acaaccttag gtacgtcggc tgtattagcg aaagcagaag cgcttgcac 360
 agcaccacaa gcagcacaag agcgaggcgc cgccgc 396

<210> 1266
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-H2

<400> 1266

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 gccggtgggc acggtgggga ggcgccgct ggcggtggag tcggactact tcacggcgta 120
 cggcgtggtg ttccggaacg acgcgccgct ggccaagccc ggcgccaatg gcggccaggc 180
 ggtggcggtg cggtctgttcg ggaccaagac gcagatctac aactgcacca tcgacggcgg 240
 acaggacacg ctgtacgacc acaagggcct gcactacttc aagggtgcc tcatccgggg 300
 cagcgtcgac ttcattcttcg gcttcggccg cagcttctac gaggactgcc gcacgcagtc 360
 ggtggtcaag gaggtggcgg tgctgacggc gcagcagcgt tccaagtcga tcgagggcgc 420
 catcgacacc ggcttctcgt tcaagaactg 450

<210> 1267
 <211> 262
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-H3

<400> 1267

gccgtcatcg taccactctc tctcgcttct tcttcttcaa tcgtccctcc ccgcgccgga 60
 attggaggaa ggagagggga caagctttcc ggcgccgacg ccgacgcgga cccggcgccg 120
 acacgatacg gtgcatcacg tgcatacacac cgttacggag gccccttga catcactttg 180
 tgctgcaact tcgatataac tcagttgcag catggcctca gtgggcgtgg caagcacatc 240
 cttgggattt cagagtggca ca 262

<210> 1268
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-H4

 <400> 1268

 cacgactcta caccggtca tggcagcgcg accggacaac cagcgtgagc gcgaccggcg 60
 acatgactcg cggcaaccag cgtgaccgcg accgtgagcg cgcggcggcg cggaagccca 120
 acgccaagaa ctcccaggac gggctcacc cggagcagcg ccgcgagagg gacaagaaag 180
 ctctggagga gaaggcggcc aagaaggcgc agcaggcagc ggccggcggc accggtacct 240
 ccacggacaa caacaagaac aaggcaggtg gcaagaagta ggaggcagtg gcgcgccgcc 300
 acctctgtac gattaatcga tgccttgagc ttgtaacttg ttcgcacccct tgtagggtgcg 360
 atgcttggtg ggtcataaac tctgatgata tcgagatttg gtgatgaga 409

<210> 1269
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-H5

 <400> 1269

 accaaaacat tcaatggccc caacggcggc ggaggaaatg gaaaggatgg tggaggcgga 60
 ttggaaggag gggatgagga aaaggaaccg gtacgggctg gtggagtacc gggcgctgcc 120
 ggcttacctg cgggacaacg agtacatcca ccgccactac cgctgcgagt ggccgctccc 180
 gcaagttctg ctctccgct tctccatcca caacgagacc ctcaacgtct ggactattac 240
 agaggaggca aatatagata ctccagtaaa ggaaatgagg atgctgaaga gaaaaagcta 300
 gcttgggagg aacgggagat cgattcttgc ctgactctga ttgcaatgcg tcgaattggc 360
 aaaatattta cgcgtttatt tctgcttgt gcttaattcc tgcgtgtgtt tctg 414

<210> 1270
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-H6

<400> 1270

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ttgtcctgcc cgtcaattcc aaggactgct gggccgacac ccgcgtcatc tgcaccaaga 120
cgcacaactg ccgggacgac acttgcgcg ggcgcggcat gccggacggc cgctgccact 180
gggagttccc caacctgggtg cccttctgcc agtgcttgcg ccccaactgc cactagtccg 240
ggcgcctcgg attggcacac ttcgccggcg atgatggatg gtgccaact gcgactgccc 300
agtctgctcc attcgttggt gtttaaggca taatatataa actgccaaat tcacatgtat 360
tttgggatat ttgttatcat actatgaaat gactgtgaat cgttggtctg atttgggtctt 420
caccacatgt tttccttgc 439

<210> 1271

<211> 199

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-H9

<400> 1271

acgcctctac acatgacggt gtgctaacgc gtccgaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaataag gaaagacaag ggaggtggtc 120
ctggaggatt gttagcttgc atgcccgctc atgggatgac aaatcacttc catggtgtca 180
cctaatttga cttccttgg 199

<210> 1272

<211> 263

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-A1

<400> 1272

gccacatcta ttaggtgcaa ccatgggtgc ctgttcaacg aagcctaaga cgcttgatgg 60
gaaagcccca gctgaagcca ccatctccac acccaagggt gcacctgaga ccactaccat 120
ccacattgag gttgctggca aacatgcagt agttgacaac gtggacgacg acaaggacga 180
ggcactaaca gtggcggcga aacaagagcc agcagccacc attgagcctc agcagattgc 240

tagtgacgtg accacttcgg aag

263

<210> 1273

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-G4

<400> 1273

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acgcagtaca gcgagtacaa gaactgggtg tggaagtcgc aggacgacct gttcctcaac 120
ggcgccttct tcaaccagtc cggcggccag aacgagcgca agtacgacag gctcgacctc 180
atccaggcca agggcggcca gtacgccgag tcgctcacca ggtacgccgg cgcgctcaac 240
tgccgcgtcg gcaggaagtg ctagtgctg tgcagctcta ggctgcagct ttcattcattg 300
gcgatcgatc gtaacaatgc aaggttgtgt tgtatataac tcttggtgtt ggaatgccgc 360
ccgtaattaa tggtaactc taacactgct tgccttt 397

<210> 1274

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-F10

<400> 1274

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tccctcacca aataaggtcc cgcccttttc cgacattcac aggggggaca ggaaatcagc 120
ggccatggcc tcgattccgg cgacgacctt cgccgtcatc ttatccgtcc tcttctgtgc 180
cgcggtggc accgccgtcg acaacgacct ccccgactac gtcattccagg gccggtcta 240
ttgcgacacc tgccgcgccg ggttcgtgac caatgtcacc gagtacatcg cgggcgcaa 300
ggtgaggctg gagtgaagc acttcggcac cggcaagctc gagcgctcca tcgacgggt 360
gaccgacggg aacggcacgt acacg 385

<210> 1275

<211> 419

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-F11

 <400> 1275

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 tccgccgcgg cgacgtcttc agtcccgagg tcctcgtctg cggcgggtcc cccaagaacg 120
 ccttcacgct cggcgagtcc aacacgttcc cgcccgccct caaggactgc gcgcgcatca 180
 accccttgaa gcccgcgct cgggtgggccc tggaccagat gcccgtggcc cgcacccatgg 240
 gcgacctgct gatcctgccc accggcgacc tgctcattct gaacggcgcg gcccaagggct 300
 gctccggctg gggcttcggg cggcagcccc tgctgagccc gtcctgtac tctccgcgcc 360
 atgcgcgggg ctgcgggttc cgggcgctgg cgcccaacac catcccgcgc atgtaccac 419

<210> 1276
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-F2

 <400> 1276

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 ggggccgccca gcaggttcag ccgttcctgt tcttgctaaa acgagagaag gatggcagtg 120
 tctcagggag ctgtcctatt cttgtttctc ctgcgcgag cagaggtggg aaccatcgat 180
 gccaaaatgg gagtagccat gccatgcat gccttgataa tggagaaagc gaaacagcag 240
 gagacggaga agaaggagga gaaaagcacg gagaaggaag agagtcaatg cttatcgccg 300
 agtctccagt tcgagggtt ctgcttcaac agcgacagat gcgccgatgt gtgcatgaag 360
 gagagctttc ccggtggcga gtgcaagcag gtcgtggcca cgcgcaagtg cttctgcaag 420
 aagccttgct agttcatcgg tcttgct 447

<210> 1277
 <211> 81
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-F4

<400> 1277

tctacagtgt gtctgattca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaggag gacaaacagg a 81

<210> 1278

<211> 447

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-024-Q1-E1-F5

<400> 1278

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cggcacgggt caaccaatgg cgggtggcccc tctacggcg gcggccctgg agcagctaag 120

cagcagcaag atgtttcgac ggcttcaatc tccgcttcg ccaccagagc gccacccttg 180

gctgcgcat gactttctcc atctacctgc ccccgcccc ggcgccaac cttcccgctgc 240

tgtactggct ctcggtctc acctgcaccg acgagaattt catcataaag tccggcgccc 300

agcgcgccgc cgctgccac gccatcgccc tcgtggcacc tgacacctcc ccacgtgggt 360

taaatattga aggagagtca gacagctatg attttggtgt ggggtgccggg ttttatttga 420

atgccacana tgaaaagtgg aaaaact 447

<210> 1279

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-F6

<400> 1279

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ccgcaccgga accgtctgga acgtcacaaa gcgcgccatc ggcgtcgaga tcaacaagca 120

ggttaacggc cgcacatca ggaagcggat cgatgtccgc gtggagcatg tgcagccctc 180

ccgttgacag gaggagtcc gcttgaggaa agccaagaat gaccagctca acgcggatgc 240

caaggccccg ggtgaggtga tcagcaccaa gacgcagcct gtgcgaacca cacctggctt 300

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tctcaagggc gggtactaga tagaattttt gtacc 395

<210> 1280
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-F7

<400> 1280

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caacctttgc cccaatcaaa accatgcatg aatcaaaggc gtcgtcaa at caaaagaaag 120
gaagaaacaa aatgatttgt ggggtggggg tttggtgcat ggccgtcgct gttaaaattc 180
gacacacgac agttgcgtaa atagacctag cgtaatcagc tgcacaaacg aatgagagag 240
cgagcgaagg aagcaaaatc tgggtgagga gatgaataga tgatgacggg agcgcgggcg 300
ggcctggcag actgggccta agcacctgct ccgatccatc tgctctgctg ggcctaagca 360
ccgccgcgga gtttggccat gttcctcttc ttcctctcct ccaggggcgc cgccccctcc 420
tgct 424

<210> 1281
<211> 346
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-024-Q1-E1-G11

<400> 1281

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acgcccgcac ctgcgcgtgg gcagcaccgc actcaccacc gccgtcgag tgaggtcacg 180
agtcagctga agagcaagtt ggtacctgga atctcaagtc ncagggtcaag aacagggtacc 240
gcaggatgag gcgcatggag gatgctgtgg cgagttcgtg agagggtctag gccatcgtct 300
cccagtcaac tttgggttgc tggaccgttg tccccttata atgaaa 346

<210> 1282
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-G12

<400> 1282

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 accagatacc cggcggcggc gatcgatggc tccgcgcagc tcatcggcgg cgacgtgcct 120
 gtgcctcgct ctgcgccggg ccacgctggc gctggccac tgggcgcaag gaggaggacc 180
 atcggcatcg gcggcggacc tggacaaggt cacggccgag accttcttgg acatcgagat 240
 cgacggcaag cctgcaggcc ggatcgtgct gggactgttt ggggacaccg ttcctaaaac 300
 agcagagaac ttccgagcac ttgacacagg ggagaaagga attgccaagt ccggcaagcc 360
 tctgtggtac aagggttgac gttccacagg atcacccg 398

<210> 1283
 <211> 446
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-024-Q1-E1-G2

<400> 1283

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 caccatcggc gccgagcgct tccgctgcc cgaggctctc ttccagccat ccttcacgg 180
 gatggaagct gccggcatcc acgagaccac ctacaactcc atcatgaagt gcgacgtgga 240
 tattaggaag gacctgtacg gcaacatcgt cctctccggt ggcaccacca tgttccctgg 300
 gatcgtgac aggatgagca aggagatcac tgccttggt cccagcagca tgaagatcaa 360
 ggtggtcgct cctccagaga ggaagtacag tgtctggatc ggaggattca tcctggcatc 420
 nctcagcnac ttccagcaga tgtgga 446

<210> 1284
 <211> 459
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-G3

<400> 1284

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cagcatgaga atgaaatcga ccgaaatctt cttgagctca gagctcgagc caccgatatg 180

gttgctcttt acttccataa ggctgcttcg gtagggcaaa atactttctt tgacgtttta 240

aaatatgttg ctgcccagtc cctttctcgg aaatcaaggc tgcacctca tcaggaacca 300

cagcagcagc aaccacaagt gcaggtggag ctgcagcagc aaccacaagt gcaggtggag 360

ctgcagcagc cgcaaccaca aaaacaagca gcacctgtta tgcgcagagg agcatctatt 420

gctgctcggc aagcagcaat ggcacagcaa tctctggag 459

<210> 1285

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-D7

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gcgtgaggaa ttcttaattc aagccagccc atcagaccca gagaatttcc catttggtgt 120

gcttggtaac aagatcgatg ttgatggtgg taacagccgg actgtttctg agaagaaggc 180

taaagcatgg tgtgcttcaa agggaaacat ccctacttt gagacgtcgg ctaaagaggg 240

cttcaatgta gaggctgcat ttgagtgtat agcgaggaat gctgtaaaaa atgagccaga 300

agaagatatg tatcttcttg atacgattga tgttgggggc gctggaaggc aacaacgttc 360

gtcaggttgt gaatgctaga agatatggag cactgcgatt tgctcggttg gttggtctga 420

ttctctaggg cttgttttgg ttggcct 447

<210> 1286

<211> 404

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-024-Q1-E1-D8

<400> 1286

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tgagaacatg ttgggtggca agaaagttac agttgtatct gttctaggtg gtcctggaag 180
tggaagaggc acacagtgtg ccaacatcgt ggagcacttt ggattcacc atcttagtgc 240
tgagatcct ctgcgtgcag agattaaatc tggctctgag aacggaacca tgattgagaa 300
catgataaag gagggaaaga ttgttccatc ggaagtgact ataaagcttt tgcangaggc 360
aatgataaaa agtgaaaatg acaaattcct gatcgatgga ttcc 404

<210> 1287
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-D9

<400> 1287

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gaagcaaac gcgcaccacg ccgtcgccgg ccggccactt cgcacgtacg taggacgcgc 120
acgcaccggt gcatatatgg ggctcctgaa ccagctgtgg gacgacacgg tggccggggc 180
gcgcccggac tccggcctcg gcaagctccg caactgcagc gacgacgccc aggggagagg 240
gctggacgaa gaagctgcgc gggaaagcca ggatgggagg cggcggcggt gacgacgccc 300
ccggcacgcc gagggagcccc accgtgtacg actgggtggt gatcagttcg ctggacctct 360
gaagcccaag ccaagacgag aactgcacaa ggaaaccac caccaccatc aacacagcta 420
gcgaa 425

<210> 1288
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-E1

<400> 1288

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 aggtcccgcc cttttccgac attcacaggg gggacaggaa atcagcggcc atggcctcga 120
 ttccggcgac gaccttcgcc gtcattctat ccgtcctctt ctgtgccgcy gctggcaccg 180
 ccgtcgacaa cgacctcccc gactacgtca tccagggccg cgtctattgc gacacctgcc 240
 gcgcccgggtt cgtgaccaat gtcaccgagt acatcgcggg cgccaaggtg aggctggagt 300
 gcaagcactt cggcaccggc aagctcgagc gtcctcatga cggggtgacc gacgggaacg 360
 gcacgtacac gatcgagctc aaggacagcc acgaggagga ca 402

<210> 1289
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-E11
 <400> 1289

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 aggaacatgg taattggatc gagattctac gcgtggataa cctggtcatc accggcaagg 120
 gaaaccttga cgggcagggc ccagccgtgt ggagcaagaa ctctgcacc aagaagtatg 180
 actgcaagat ccttcccaac tcgctgggtga tggacttcgt gaacaacggg gaggtgtccg 240
 gggtcacgct gctcaactcc aagttcttcc acatgaacat gtaccagtgc aagaacatgc 300
 tgatcaagga cgtgaccgtg acggcgcccc gggacagccc caacacggat ggcattcaca 360
 tgggcgactc atccgggatc accatcacca acaccgtcat tggcgtcngc cacgactgca 420
 tctccatcgg c 431

<210> 1290
 <211> 394
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-024-Q1-E1-E12
 <400> 1290

tacaacactc tacactgact cgtatgtaca tccgatccct gtccaccgcy ttgggagcgg 60

cgcagcccat ggacgacaac gagagagaga aagagaatga gaatgagaag gagaagcact 120
 acgggactga cgctgaggat gaagaagagg acgaggaagg taacaagcga gtcgtggtgc 180
 ttggcccccga ggtccccctc aaggagcagc tcgagctcga caaggatgat gagagcctga 240
 ggaggtggaa ggagcaactc cttgggcagg tcgacacaga gcagctggga gaaactgcgg 300
 aaccagaggt caaggtggtg gacctgacga tcctgtcacc tggcagaccg gacctgatcc 360
 ttccgattcc gttccaggct gacgagaagg gcta 394

<210> 1291
 <211> 211
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-E3

<400> 1291
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 tcagtccgtc taacaatcga ggtcgatgac gacgtcgccg cgcgtagggc tgctcggtat 120
 agcactggcg ctgcctgctg tgctgctcgt gaggtccgcc gacgtgctg ccgaggcgctc 180
 ccctactcca ggcggctcca cctaagggtg c 211

<210> 1292
 <211> 357
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-E4

<400> 1292
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 ccgtgctgac cacggtgccc ggcgtcgcgc tcgccaagtc gaagctcgcc aatatgagcg 120
 acgacgtctt gaacgggccc ctctgaccg agaagatcta ggcgaagaac acgctgatcg 180
 tgaggccgga cgaggagttc aagaccgtac agtccgccat cgactcggtg cccgccgggt 240
 acgcgcagtg ggtcatcacc tacgtcagct ctgggctgca caggggcaaa gttgtgatac 300
 gggagaaaaa ccttcatctt tcctgagggg caacgggaaa ggccgggact ccatctc 357

<210> 1293

<211> 408
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-024-Q1-E1-E5

<400> 1293

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ctcttgcaaa aaaccttacc cggggtcggg cggtccgacg gtcagtccgt ctaacaatcc 120
gattctcatg acgacgtccc cgcgctgtg gctgctcgcc atggcactgg cgctcgctg 180
cgtgctgctc gtgaggtccg ccgacgtgctg tgccgaggcg tcnccgactc caggcggtc 240
cacctacggg tgcaaccggg ccacggacaa gtcgtgcaag cccgagggcg tgggggtggt 300
gctgccgggg ggccggcatcg acctcgacgg cgacggtgac gaggacgagc tgccgcagtt 360
ccaacccac ctcgatgatcc tcggccatgg cactgatga gtgtaaat 408
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<210> 1294
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-E6

<400> 1294

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tcaggggagg aagaaagggg acgacggcac gaggtttaaac caacaatctc tcgtcatata 120
tatcataata gagagtacga cgacaaaagc catgggcagt aatggcagac atcataggcg 180
cggagtccca cgcccgccac ctttaccact ttacagggat tgggaggagg aagaggtcgc 240
caacaataag aggtgtgcga agcagctgtc catgaacgag accaccatgg aggtcaagtg 300
ggagaagcgg aagcggcaga tacaacggca gaggagcagc atgcgcctga gcgaagccga 360
cgacagggca ggtggcagca ctgctgtctg tcctgttgac ggcgaggcga gctcgagcgc 420
ggagcgggtg gccactggta taaccgac 448
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<210> 1295
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-E7

<400> 1295

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tggagccgtt ggaccccggc gcggtgggca gcgtcctgcg gtacggcctc gctgccaacg 120
ccctcgacta cgaggccacc ggggagtcgc tcgtgtacag ccagctgtac ccgttcgagg 180
gcctccagaa ctacacctcc ggcatcatcc accacgtcgg cctcgagggc ctgaagcctg 240
ggaccaggta cttgtaccgg tgcggtgaca ctgccatctc ggacacaatg agcggcgtgc 300
acgcgttcg cagcatgccg gctgtcgggc ctgggagcta gcccgggccg attaccttgg 360
tcggggacct cgggaccacc tactctacca cctcgactgt gggacacatg gtgtgcaaatt 420
gcaccgatct g 431

<210> 1296

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-E8

<400> 1296

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acagggggga caggaaatca gcggccatgg cctcgattcc ggcgacgacc ttcgccgtca 120
tcttatccgt cctcttctgt gccgcggctg gcaccgccgt cgacaacgac ctccccgact 180
acgtcatcca gggccgcgtc tattgcgaca cctgccgcgc cgggttcgtg accaatgtca 240
ccgagtacat cgcgggcgcc aaggtgaggc tggagtgcaa gcacttcggc accggcaagc 300
tcgagcgctc catcgacggg gtgaccgacg ggaacggcac gtacacgac gagctcaagg 360
acagccacga ggaggacatc tgcgaggtgg tcctggtgga gagcccgcgc aaggactgcg 420
acca 424

<210> 1297

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-D5

<400> 1297

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gctggcgctg gtgctggcgt ggcgcgtgct ccagccgcgg ccgtccgacg ccgcggcgca 180
gcccccccg cagtcgccgg cgacggcggt gtcgtcgggc gccgccaagc ccaagtgcgt 240
ggccggcgcc aggaacgacc acgcgtgccg cgtcggcgcc gtgcacgacc cggacagcca 300
ggaggaggag ggctccagcg tcaccatcga cgcgcccgcc gccgcgcccg acgacgtcgg 360
ccacgacgac ggcagcgact acaacgaccc cgacgtgccc aacaacgaac agctcg 416

<210> 1298

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-C3

<400> 1298

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ctccctggca tggaggaagt agctgtttcg cctatgatcg ttgccgccgt agtgctggac 120
aacaatggcg ccgacgcggt ctctgcact gccatcccta gcgtaacaat aagcctagag 180
gagaaagaaa atatcaatgg ggatgttccc acgatcacct cggccgcaag caacgaggag 240
gaggcgttgt tcagtgtcgg agaatccacc aaggacgatg gccatcgctt gacgatggaa 300
tgcaccactc ccgtctctc cagtagccct tccactcgca agaagcgcgg ggcgttcagc 360
ctcttcaggg cgatgttctt gtccttcggc cggagcgacg acagcatgaa gaagacagac 420
gacgacacca cgagcccc 438

<210> 1299

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-024-Q1-E1-C4

<400> 1299

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 tgtcatatcg tttaagccca caatggtaac aatactttcc cccgagggtg cagaaaaaga 180
 atcagaagct ggtgggaaga tgggtgacct agattcttat gagattgaag gcggcgagac 240
 anaatcagag attttgcaga atctagctga gttccagttt tcttgtgtcc tgtacaatgg 300
 tgcnctagag aatgcatgca gtgagcttgg agcccgtatg tctgccatgg acagctctag 360
 cagaaatgct ggcgatatgc ttgatcgtct cactctcact tacaacagga cagccaagc 420
 atccaatcac acagagctta ctg 443

<210> 1300
 <211> 301
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-C5
 <400> 1300

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 gagctgctga tgcagttcga cgagaaggag agcataagca cctcctccat tgaggagcac 180
 ctgcaagaac ggctccctga cgctgtcgat ctgaaagccg tggatctcga cagcagcatg 240
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 a 301

<210> 1301
 <211> 457
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-C7
 <400> 1301

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gcgacgcctt catcgtcaac gtcggcgacc aagtccagat actgagcaac tccgtgtaca 180
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agggcgccag gggcaaggcg cagatcgagg ctctcaangg gcaggggaac acagaaagtc 420
aattatagac gacgactagc tagctactag ctagtac 457

<210> 1302
<211> 412
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-024-Q1-E1-D1

<400> 1302
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atcatggacg tcgagttcag aagggtgcga tgcaagtacc ccgccgggca gaagatcgtg 180
ttccacatcg agaagggctg caaccccaac tacctggccg tgctggtgaa gtatgtggcg 240
gacgacggcg acatcgtgct gatggaaatc caggacaagt tgcgggtga gtggaagccc 300
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<210> 1303
<211> 210
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-D10

<400> 1303
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atgtctatct aataagtccc tcatcaaaa ttgttcttta tgtcatgtat atgtacgtgc 180
atatatatat ataaaaatac gtctcctttt 210

<210> 1304
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-D11

 <400> 1304

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 agccactgca aaggggtcct ctcgatgtgc agctactcct ccatggacgg tgtgctgtac 240
 tgcaagaccc acttcgagca gctcttcaag gagaccgga gcttctccaa gaacttcacg 300
 ccaggtggca agtcattcaga caagggtgaa ctgacaaggg cccaagcaa gctgtcgtct 360
 gcattttctg ggtaccagga taagtgcgca gcattg 395

<210> 1305
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-D12

 <400> 1305

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 agagcgcttc atggtgaaaa aacaggacgg gctggtgaag ctgcaggggt ccaagcaagg 180
 gaggaagggg cagctcgcga tcgacgccga gatcttcgag gtgacaccgg cctttcacgt 240
 cgtcgaggtg aagaagtcgg caggcgacac gctggagtat gagatgttct gcagcaaggg 300
 cctaagacct tcaactcagc acatctgctg gagcagccga tctgaggaga acatggctcc 360
 ttcagtggtt cagccatcat aattgaagcc atcctc 396

<210> 1306
 <211> 294
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-A1

<400> 1306

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tgtgacgtga tggagctctt gtcctggaag caaccaagt gcccccaatt gtacatatac 180
agctccgccg acaggggtgat ccagcgaaa tcagtggagg cattcatcga cggccagcgg 240
aaagccgggc atgaggtgag ggcctgcgac ttcgtgtcat cgccccatgt ggac 294

<210> 1307

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-A11

<400> 1307

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cgatgtggag cttcttagaa aagagatgaa tgagactgat gtccccgtat cttactcagg 180
cactggcatc cctgagaagt caatacgcaa agcagctctt gaggttattc tccgcaggct 240
cctctctttt ctcaagccag acacctttca gggtgccatc aaggcaatca acgaaagaat 300
tctctctgtc cttgatgctc ctggttctgg tcgtgttgat ctgggtatgt tcttcgcat 360
cattgtcca atctgttcag gccctgtgga taggcgcaag cgtatcgtct ttgatgcact 420
tc 422

<210> 1308

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-024-Q1-E1-A12

<400> 1308

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 gaaagggtaca cgctgcatca gcagggtgcc tatgcctgcg caaaccgtag agccgcgtct 180
 gatgttgctc tggacatgag agcaccacct tttcagcatc tatcggcagg gcagagaagt 240
 gactcttggtg ataggctgac agcagagaca aacttgtaga cgagatcaac caacggcatc 300
 gctgccactg cagcaggagt ggcagcaact actcacagaa aggtcggcgt tgttccgttt 360
 ggcattgtcan acatgttata gtgactggat catggccgaa tcatggtgaa tcctctg 417

<210> 1309
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-A2

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 aggcaccggc agagtcaccg aaggcaggca gtcttgccaa ggcaccggcc gagtaccga 180
 acgcaggcag tctgcagct cctgccaaagg caccgagtc tgctgccacg agaactgccc 240
 ccgctaattgc acctcaagcc gctccaccc ccgcccgttg cgctgcccc tgcgcgtcgt 300
 cgtctaggaa gtctgggtcca gctgccgcgc cgaccaccgc cgctctaca ccgtcgtctt 360
 ccacggacga ggagttgagc ccttcgcgt cgggatccac cgccgacgtg gcgtcgcctg 420
 ccgctgatgg 430

<210> 1310
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-A4

<400> 1310
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 agaactgctc tgctcttcag agctccaagg aggctgcacc tgacgcatgt ggggttgaag 180

actccgtgga cgtggagaag ggcaagggct ctcaccaaga ctccaaagac gatgtacctg 240
tcagtgaag atgtgaacag tggctccatg tgctgaacaa gaacgatgct gagagcatga 300
gtgagaaaca taagttgggt gagcagatca ggatcctgtt gaagaacgac gacgaacttc 360
ggaactatgc aggtgctaata ggtattactg agccactaat ccattttctg aagatggcta 420
tccacagagg aggtgtgcaa tct 443

<210> 1311
<211> 275
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-A8

<400> 1311

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gaggtcaggt tcgggaatgg ccgtctgtga tgaatgcatg ctcaagttcc aggatctctc 180
cgcatgcagg agcttcggct tcatcgtgtt caagatgaac cagaacgtgc agcaggttgg 240
tttggacagg ctgcgggggc caggagatat tctac 275

<210> 1312
<211> 251
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-B1

<400> 1312

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ccgctgcctt ttggtgcttt gggaaattgg tgcgtggatt gcgaggaaag ttcaggggca 120
cagatcaatc tgtgggagta gccaaccaac ttcaacatcg tgcacgatt agtcagggttc 180
gtgacccaaa gctacatgac gacctagaaa ctcttggcgg ctgtgactag ctttttgcgt 240
gccggctgtt c 251

<210> 1313
<211> 378
<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-024-Q1-E1-B3

<400> 1313

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ctcttctgca tcgtgcatgg tgagaaggaa gagtcaaagg gcatcgatgc gaaagcgtcc 120

gggcctgggtg ggctccttcga catcaccaag ttggggcgctt ccggcaatgg caagacagac 180

agcacgaagg ctgtgcanga ggcattgggca tcggcggtgcg gcggcactgg gaagcagaca 240

atcctcatat cccaagggcg acttccttgt cngacaactc aacttcacan gcccttgcaa 300

agggcgacgt tgacatccag gtggatggca atctgctggc gaccaccgac ctaagccaag 360

tacaaggaac atggtaat 378

<210> 1314

<211> 85

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-B5

<400> 1314

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tactcttttg ttctttgaaa gaatt 85

<210> 1315

<211> 199

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-B7

<400> 1315

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ggcggagagc ggcgaggcgg cggaggcgaa gaagatccag gacgacttct gctcgacgct 120

gtgcgagggc aagaagggga cggacctggt cgtgtgcaag gagtcctgcg cgctctccca 180

gcagttcaac ctggtgctg 199

<210> 1316
 <211> 294
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-C1

 <400> 1316

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 cggcggcgagg gagggcgccg aagctgtcga tggagacgtt ctcggggatg atcaagaggc 180
 cgttcgccaa gttcctgagc ccggtgatca agagcgtgtg cgccaagacg gagtaccgag 240
 aggactgcga gtcgtcgatc gggggcctca cgggggcccg cgtcggggcg gccca 294

<210> 1317
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-C10

 <400> 1317

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 acaacaaatc cttgttcggt tattttctaata acatatggat tggatgagat tggaaaaaat 120
 taagaagaag tttaacttgt ttgcgattca aacacatcca atctcattca attcacatgg 180
 attgagagct aaccgaacaa gcctgtagtt ggacaagggt gtaaacactta tttgtcaggc 240
 gtaccgggca cagaccgctt cctatttgtt cgtgggggatg taactgtaag ccttgtgacc 300
 cctaagcagt ctgcgtcttg tgctgtctgc ttagcgggta gagcagagag agagatcaaa 360
 tgtaaattac atttnttagc tcaaattcac gacannnaa 399

<210> 1318
 <211> 271
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-G5

 <400> 1318

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acctacattc gtctgtgcta atcgtgctga gaacagacga gagttttaca cagacttaaa 120
agatcaacgc acagcttttg cacatgagaa tatccagaca cacgccagca agaggggaaga 180
ggaaaaagaa tctctatgac aactgaggaa taacttggac gtccgagcat aacgcattgtg 240
atacttcgag cactacggac acccaccaaa c 271

<210> 1319
<211> 399
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-023-Q1-E1-H10

<400> 1319

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accgacctgc tgtccaacta ctcgcccgcc atcacggatc tgcactccat cggcgcgagg 120
aagttcgcca tcatcaacgt ggggctggtg ggggtgcgtgc cgggtggtgcg ggtgctggac 180
gcggaacggcg ggtgcgccga ggggctcaac aagctggctg aagccttcga cgtcgcgctg 240
gggccgctcc tcgccggcct cgccgacaag ctgccggggc tgacctactc gctggccaac 300
tccttcgcc tgacgcagga cgccttcgcg gacccgaagg cgtcagggta cagcgacgtg 360
gccagcgcct gctgcgggag cnggcggctg ctgggcgga 399

<210> 1320
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-H3

<400> 1320

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gacatgtttg acgctctcga gagcggccca ggacctcctc tagaagtgcc tccctcgcca 120
tcgtcagcca agaagcgttt gtcccaggcg ttcgaggtca acccgagtgc ctcagcgccg 180
atcaagggtg cggttgagag ggtaaagcgg cactcgcagc taatttccag tcacaggatg 240
tcgtgtcct gagtcaaagc aggagatggg acgcaaagtg ttgtgattat acgatacgtc 300

gggtgacact tgtgttttcc ttttgctgt gtacgtatta cttgttacgt gtgacatggt 360
 gggatttttt gtgcctacat atggggggg 389

<210> 1321
 <211> 446
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-023-Q1-E1-H4
 <400> 1321

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 gccttgctga gcttggcgct ggtggggctg ctcatctgcc acctcgccac caccgcctcc 180
 gccggcaaga acagaatccg catcctcgac agcgctcgac actcggccgg ggacaacaac 240
 agtcccgacg cctcggccgg ggacaacagc accgactccg agtcggaagg ccgcgtcgtc 300
 tattccgaca tgaagctggc tgatgagacg ggatctgcgc cggctccggc accggcgccg 360
 gggccgacga ccagttgaag cgaggaagggt ggccaaaaac tgagggggccc ggctactatc 420
 ttttgctata actaaagata gggcca 446

<210> 1322
 <211> 302
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-023-Q1-E1-G3
 <400> 1322

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 tttgactgct ggaatgctag gtcgccgtcc cggagaggcc ctcatgtta actttgcatt 120
 cctgctgcac caccttcttg atgaaagtgt ctcaattatg aaccaaagg atcggcttct 180
 ccgtatggtg aagggctctc gaccaaact agtgacgttg gtggagcagg acgcaaatac 240
 taacactacc ccattccctt ccaggttccg ggaggtctat gactactatt cggcactttt 300
 tg 302

<210> 1323
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-E9

 <400> 1323

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 gcagatggat cggagcaggt gcctacgccc agtctgccag gccgcgccgc gctcccgta 120
 tcatctattc atctcctcac ccagattttg cttccctcgc tcgctctctc attcgtttgt 180
 gcagctgatt acgctagggtc tatttacgca actgtcgtgt gtcgaatttt aacagcgacg 240
 gccatgcacc atacccccac cccacacatc attttgtttc ttcctttctt ttgattcgac 300
 gacgcctgtg attcatgcat gctctcgatc gaggcagagc tgttgatatgt tgttatgggtg 360
 tactattcta tttttttatt tagaaagttt tg 392

<210> 1324
 <211> 393
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-F3

 <400> 1324

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 cccttccctt cttcttcttc ttcttcttct ctcaaaaacc caatccatca gcgctgcct 120
 ccgcattgct cttgatccca tccagtacat cgattctccc cccaagatca aaggccggag 180
 gaggaagaaa ggtagggag tcggccatgg gatgcttttc atgctgctgt gtggcagatg 240
 acgacaacgt tggcaggagg aagaagcatg acgatcccta tgttctatc cctgctcatg 300
 ttataaattt tggacctagc cggttcccag cccaacccc tgtcatctcc actggcagag 360
 ctacgccaat tgcagtaccg gccattcatc tgg 393

<210> 1325
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-023-Q1-E1-F4

<400> 1325

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ttactggcac gccaaacctta tgacctgata gagagccata taaaacgcct tgatgaagac 120
ttggggccagt ttgcagaaga tttaaagcat gaagggaaga tacctccaga tgaacctaca 180
gtccttctctc cagttccggt ggtagcagg gatgagaaaa ggaggtttgg ttttagtaca 240
cctcaagcat caaaaaaatt tagagagagg gaatgggaca gggaaagggg tatggacttt 300
gatttaatgc cccctccagg tagcagcaag aaagcaggta catctatgga tgtggatcan 360
acaattgatt caaatgaacc gacatactgt atatgccacc agatttcaaa tggtgacatg 420

<210> 1326

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-G10

<400> 1326

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gccggcgacg atcgaggagg gaggaacgcc agagacccgg cggcggcgac gatggctccg 120
cgcagctcat cggcggcgac gtgcctgtgc ctgctctcg ccgcggccac gctggcgctg 180
gcccacgggg cgcaaggagg aggaccatcg gcatcggcgg cggacctgga caaggtcacg 240
gccgagacct tctcgacat cgagatcgac ggcaagcctg caggccggat cgtgctggga 300
ctgtttgggg acaccgttcc taaaacagca gagaacttcc gagcactttg cacaggggag 360
aaaggaatgg ccatgtccgg caagcctcta tggtagcagg gggt 404

<210> 1327

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D3

<400> 1327

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aacaaccgca aacgggaaga aagggttccc aattggccaa ggctgttacc ggctcattgg 120
 tggtaatcat caccaggggc ccccggcgatg tcatcaacgt cggatgacta ggacgctaca 180
 gagaccacaa ggagctgaac gacatcacgg tacgagcact gcgtgctcaa aaataactaac 240
 aacggcgtgc gcaacaagtc gtacgtgaat cccgactccg ttctgactga ttcgcatcgc 300
 accttcgaca tcatcatgat ggaggacgta gccaaaccca tcgtcatcca tcagtacttc 360
 tgcccgcata acgtatgccc tggca 385

<210> 1328

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D4

<400> 1328

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 ctgcataagg aattgcgtcc aaatggcatg gggcccggca acaatacgcc gtcagccgca 120
 gtcaaccaga tggttgccga cgccagacac tacatcgaca aagactacaa tgagcatatg 180
 aagcatctgc atgacacgaa acacagactg tgtagtctag aaaacaaact aacggacgtc 240
 tgatgtgtcc gaccaggagg tcaacagcat cctgaagcag ttcgataaga aggatatgga 300
 gtacatgcag ttgcagaggg acattgttaa cgtcaaagat ttcgagctgc taacaatgat 360
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<210> 1329

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-E3

<400> 1329

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 ggggccaaaga acaacttcaa gtacaagtgg gaaccaatg gacaaattcg gaactttctc 120
 cacttcccgt caatcggatg caacggggcg caggcgggta cggcgccatc agcgtgggtga 180
 gccccctcct catcacggtc gccttcgacc agccgccgcc ggagagcgac cacgcgggtgc 240

tcatacggcga ctggtacacc aaggaccacg aggtgctggg gcgccagctc gacgccggca 300
agagtctggg ccgccccgca ggcgtgctca tcaatcgcaa tggatgcaca gatcaggaag 360
ccacaac 367

<210> 1330
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-E5

<400> 1330

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tcctggggcc ctgccgcccc gccgtggccg tcgaccacgc gcagctcgcc gaggccttcc 180
gcgccttcga ccgcgacggc aacggcttca tctccgccgc cgagctcgcg cgctccatgg 240
cgctcatggg ccaccccatc tgctacgccg agctcaccga catgatgaaa gagggccgaca 300
ccgacggaga cggcgctatc agcttccagg agttcacagc catcatgggc aagtccgccg 360
tcgacttcct atgcctcgct gctct 385

<210> 1331
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C11

<400> 1331

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ccgccgcgcg tcgtgccggc cccgttcgcg cgcgcctcg ccatcgctctt cgagctcttc 180
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gccggcctcc tcgcgtacga cgcgtcggcg gggcccgaag cgcgcgctctc gctccggggc 300
ctcggcgcgc cggcgcgct cgagttcaag gacgacctgt cggcgggcggc ggggtctggac 360
aagggggctg agttcgacgc 380

<210> 1332
 <211> 376
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-023-Q1-E1-C3

<400> 1332

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 tgacgataac acggacaatg tgccaaggcc tgctgcttcc actactggcg gcggcgctcga 180
 cagcgacggc gcatttcacg gtcggcgatg tggatgagta cgtgtccaag cgcacgcagg 240
 agtcccgccca caggaacaac ggtggcgcg gcatcgatga cctcatctcc agtgcggcg 300
 gcttccacgc caacgtggat gcacgcgcct atggccgtcg atccgacctg cangangaag 360
 caacagctac cgtaat 376

<210> 1333
 <211> 366
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C4

<400> 1333

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 gaaggctgca ctgcgggttca tcgcggggtg cctgtcagaa gacgacatcc gtggggtcaa 180
 ggagatgttc aagagcatgg actccgacag cagcggcacc atcaccgtgg actagctgcc 240
 gacacggctg gccacaagg tcaccaagct gatcgatgcc gaactccagc agctcatcga 300
 agctgcctac tccaacggga acgggacgat cgactacgag gagttcatca ctgccacgat 360
 gcacat 366

<210> 1334
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-B5

<400> 1334

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ccaatcccct gaggcttggc gggcgcgctg tacaccacag ctaaggtaag ttcaccgccc 180
ggccgtggaa acacgcccac gcgaccttct accgtgggcg ggacgggtcc ggcacacagg 240
ctggctcttg cggctacaag gatactcgca cgcaggggta tggcgtgcac actgtggccc 300
tcagcacggg gctgtacggg gacggcacgg catgcagatg gtgctacgac gtatgctgcg 360
tgaacagccc tagcgggtgc aagcccaccg gagca 395

<210> 1335

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-A3

<400> 1335

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taacaaccct tccaaaaaag taccatttct ccgtgaggcc tgagcccctc gccgcggtga 120
gccaagccgg cgcacgtcgc cccggggctc acgtcacca ccgagcccca accaattaat 180
aatatatata tatagctagg atcgatcgtc agtaaaatgg caggctccgc cgtcctgagg 240
agccccctgt ccgtcctcct ctacatctc gccgcggtgc ccgccaccgc cgcggcgacg 300
ccgaccgacg ccgccatcga cgaggcgtac gcgcacctcg tcaacctcac cgctaaccag 360
gag 363

<210> 1336

<211> 465

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-A4

<400> 1336

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 accctccaac atcatgcatt gcaggctctg ctgggtgagga tatgttccac tggcaggcaa 180
 ccatcatggg tcctcctgat agtccatatg ctggaggtgt tttcttggtg aacattcatt 240
 tcccgccaga ctaccccttc aagcctccaa aggtatcttt taagacgaag gtcttccatc 300
 caaacatcaa tagtaatgga agcatatgtc ttgacattct taaggagcag tggagccctg 360
 ctttgacaat ctctaagggt ttgctttcta tctgtccct gcttactgat tccaaccag 420
 acgacctct tgtecctgaa attgctcaaa tgtacaagac ggatc 465

<210> 1337
 <211> 67
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-B4

<400> 1337

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 gcccggc 67

<210> 1338
 <211> 280
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H12

<400> 1338

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 ctttgcattg agcttagcac ttgtgtcgat gatctcagcg atgatccgtc cgacacgcag 180
 cagatacct ccgatgtgtt ctaggagctg cctgaagtgg agctatgctc acagaatcgt 240
 catcagcagt atacggcggt ccatgggtcca gtctgacatc 280

<210> 1339
 <211> 300
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H3

<400> 1339

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gagggcgctc ggcagggcgg cgacggggac gaccaggacg gcgccgctgc ggcggggcggc 120
ggtcgcgctt tcgttccctc gggcggtgcc ttgtccgtca cgtccacggc ctctgccgcy 180
gacttcttct ctctgttttc ctcttgctc tacattgtcc gtcgctcgct aatcattcct 240
ctgttttctt cccgctcttc tatctgtttc tttaattctc ctctgcatc gcttttctcg 300

<210> 1340

<211> 295

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H6

<400> 1340

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caccatccgt cgtcgccaaag cgtaccaatg agccaacgac atcaccaccg cccagcgggga 120
atggggcaca acatgaggat tgtcgcgctg gccttggtgg acctgctggt ggtggcgggc 180
gcgccgcccg tcgccaccgc gtacggctgc tacgaccact gctacgatcc ctgctccaac 240
gggagcagag acccctgcct gcatcaagat gtgcaaccag gcatgcggct ctact 295

<210> 1341

<211> 124

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-F12

<400> 1341

gatgaagtcc gtcacacgcy tgaaggaggc cacttgaaa tgcattctcg tgcaggttca 60
tctgcacagc tctgtaccaa cattcacag gcgagcgctc gacgctgttc aaaggcaatt 120
caga 124

<210> 1342

<211> 426

<400> 1344

tcttggggccg acacacgcgt ctacacatgc gtctgccaac gcgtccggtg cacaacaat 60

gcgatgagag ccttgttctt cctggctctc ttctgcatcg tgcattggtga gaaggaagag 120

tcaaagggca tcgatgcgaa agcgtccggg cctggtgggt ccttcgacat caccaagttg 180

ggcgctccg gcaatggcaa gacagacagc acgaaggctg tgcaggaggc atgggcatcg 240

gcgtgcgccc gcaactgggaa gcagacaatc ctcatacca agggcgactt ccttgtcgga 300

caactcaact ttacaggccc ttgcaagggc gacgtgacca tccagggtga tggcaatctg 360

ctggcgacca cggacctaag ccagtacaag gaccatggta attggatcga gattctacgc 420

gtggat 426

<210> 1345

<211> 269

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H8

<400> 1345

cagatcgcaa acggtgcata ccattacca ggaagctgct acaaggcgctc agatggcctt 60

gtcatacgca ttctctcacc agtggaggag catgaacacc tcttctgcgc gagctgcgca 120

gtggacatgc tcccatgtac atggaaacct ggcaggcccg aactgggggc tgttgctggg 180

cgagagcgct gggatggcgg ctaccaggcc gtgggagaac cagaccatgc caccgccggc 240

cactggccgc gcagcatcca aaagcgcta 269

<210> 1346

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A1

<400> 1346

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ttcttactag gcgactttgg gttctagtta tattccagga cctgccggag aggatcaagc 120

tgctgcagga agagatcggg cagtagcagg aggaggcgcc gggcatgctc agcgttttcc 180

gggacctcaa ccccgacgag atggtggcca ggaacacccc aagtcgcgacg tgggtgcggaa 240
 ggagggcggc gacacccggg tggagatcta ctgtgccgcg tgcacttcaa cggatgatggc 300
 tcgtgggatg tgattagga tggtaatgga attgtctctt cacaatttct ttgagccctt 360
 aattaatttt agttcaaaaa tgaatagaaa tagaacctg 399

<210> 1347
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A11

<400> 1347

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 atgacggcca tgggctacgt gccgtacctg tgcgggctca actacacgga cgacaagggtg 120
 agcacgatca tctaccgga gccgccggtg tcgtgcgcca agctgtcaag gctcgaacag 180
 gacgacctca actaccgctc catcacgctc atcctcaacc agccgccctt caccgcgacg 240
 gccaacgct cgcgcacgaa cgtcggcgcg gccagctcga cgtacaccgt ggaggtgaac 300
 gtgccggcgt cgggtgacagt ggaggtgaac ccgccgaagc tgactttcaa ggcgctggaa 360
 gaggtcctga actactctgt cacaatcaag tcggccaacg gccaggcgct taccggccct 420
 gt 422

<210> 1348
 <211> 415
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-F4

<400> 1348

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 ccgcaaacgg caaattaacc aatggcccct tggcaaacia acccaaaaac ccttaagggg 120
 aaggcccaac ttaaggccgc gttttcaaaa ccaaagggtc cccccaaggc aatccaaacc 180
 ccctttaagg ttccggctaa taaacaggta cctaaaaagg tggtgttgga gaaccgggtt 240

gcggcgccg acgttgagca tcagaaagct aatgaggtgg tcgctccaga agcggccgctc 300
gccgagcccg atcacaanga ngaggaagcc gtggagaaga ccgtcgtcga agangagaag 360
ccagcggcag ccgccaatgc agaggaaaag gtcgccancg ccgccgagaa cacga 415

<210> 1349
<211> 414
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-021-Q1-E1-E4

<400> 1349

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gctacttctt gacgcacttc accgacacgg tcagcaacct acaggacgcc aacatcaccg 120
tgtttgctcg cgtactcaag aacgagttca tgaacctcgg cttegactac ttcgctgacn 180
cgacggtcga gatcgctacc tacacgttgg cagtgtggc tgatgggctc gtcacggaca 240
accctgccac tgcagcttcc taattcagga gtccatgcag tgacatgaag ctgaacctga 300
gtacacgat cctgcctgca caacctggcg ctctgggtcaa cctggcatcn ccggggggcc 360
ctggctccgg cgggagcccc ggcaccgttg ctccaaccg ctgacgttgt ggac 414

<210> 1350
<211> 325
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D11

<400> 1350

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atcgaggtec tgaccgtacg gacgacctcc acaagcggag gatccgccgc gctcgtggtg 120
atatgcatca cgacactgtc cgccaacctg tgaaacataa cggaggcgaa gcacaccagc 180
acgtacaagg tgggtggacgc ggtgacggtg ctaaagatgc aggtggacgt ctgcacgaag 240
ctcttttagg ccgcgcaggg gatcgccatg gacgaggtca atgcggcctc cacgctcgac 300
gagcagtcgg cgctgaagct ctgca 325

<210> 1351
 <211> 352
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-021-Q1-E1-A3

 <400> 1351

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 tgctgccctc ctccctggcg tccccccgcg cggagaagac tttccccgga ggcngatgcg 120
 gacgctacag ctggttggaa gccgatggcg gacgcagcgg cggcggctac tccacccccga 180
 gcgatgcagc gccatccaca cctgccgctg gggagactac gaccccttcg tcatgcggcg 240
 gttactccac ccctagcgag gcagcgccat ccacgcctgc cgctgaggag acgacgacga 300
 ctcccttcgtc aggcggcgga ggttacggcg gtgcaaccgg caaagcttcc tc 352

<210> 1352
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-G12

 <400> 1352

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 ttcagagatg ggggtggtgg gcagtatttc atctttgggt tccacaatgc tcacgtgatc 120
 aggcagaggc ttcttagggc caatcttacc agtcgggtcc caaggcagca tgatctttac 180
 cttgatgccc agcacaccct gtctgagcag cacatggcgc acggcgggtg ccacatagta 240
 gttaacaggg tccccactgt ggatcatgag gccatccaca aacttcatgg atttagccct 300
 ctgtcctcga agtttccag acaccaagac ctgcagcct ttggccccac tctccatgat 360
 gaaccgcagc acaccatagc aggcctccg cacagcaagg cctcctanga gtttgtaacg 420
 cagagactct gcct 434

<210> 1353
 <211> 355
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G9

<400> 1353

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cttctggaac cctcctccgc ctgccagaga cctgaggact ctgttcatca ttgcacacct 120
ccccaggggtg gggattgagg ggcccagaag ggctgcctgc cctgggtcag gcaggggtcac 180
cttgggaagg ctcggaagca caaatgagtg ctgggcttgc tgctgtgcca agggtcatat 240
gtgactgccg ctgttgacct gcgctgcgtc acagtggagg ggtttgggcc tgtgcttctc 300
tgccctttca cgaaagtgga gccagaaacc ttgccaaggc catggctgct gtctt 355

<210> 1354

<211> 414

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-020-Q1-E1-H12

<400> 1354

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actgttagct gcgttacacc ctttttcttg acanaaccta acttgcgag aaaacgagat 120
gagattggca tggctttatt tgtttttttt tttgtctttt ttgatttttt ttttttttgg 180
cgcttgactc aggatttaaa aactggaacg gtgaaggatga cagcagtcgg ttggatcgag 240
cattcccaaa gttctacagt gtggccgagg acttgattgt acatggtttt gttttttttt 300
taatagtcac tccaaatata gcgaaatgca ttgttacagg aagtcctttg ctttcccaaa 360
agccaccccg cttctctcta aggagaaggg gccagtcctc gcccagatcc acac 414

<210> 1355

<211> 347

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-H4

<400> 1355

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ctgcgtacga tggttcttgt aaagatgctg cagattcctg aaagacggta cttgaactgc 120
 ccggagcatg ttgtatittc ttaagatgct ggaactaaga cggcttagtt gaattttcac 180
 tatcaagtga gtctcgggtct tgccccaaaa agaatgtttt gtacctcttc tgtcccaatt 240
 tatacgacaa ttataattc gtaaaaaaaaa aagtgaccga aacaaaaagc aaaaatcaaa 300
 gaaccataac agaaagaaga agaaagaggg ggatccgccca ggagttc 347

<210> 1356
 <211> 330
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G11

<400> 1356

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 ataaaaatgg tgtagtaatt gcagaaaacc taggtttatc ctcccatata cttcaaatca 120
 gctactagat gaggtataat acttaataca ctgtagatgc aagggtctata gttgtaatta 180
 caatgtaaat gctatgtaaa tagttgctga atgtgtagga tgttcaagtg tttgcatggt 240
 ggtacttgac tgaacttttt ttcttctttc gaaaggatgt caaccattg gttggctgaa 300
 tccgtgaatg tggaactcat tgagtcgagt 330

<210> 1357
 <211> 454
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F10

<400> 1357

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 gagggctccg tgcaggggtg atccttatca cttgaagtcc tctctggcca gagtccctca 180
 ccttcccaca gcccttgcta atgattacca taaagctgc ctccggcctg gccttctagc 240
 ctgagcccag tcaaaagtcc cacctttacc atttgatttg gtgtgtgccc ttagagggaa 300
 ttcagagctc cgttaggctc atagaggggc ccagaccaa gatatggagg gaggggtccc 360

atatcagcaa acacctcaag tttcctgcac tgtgactgca tttaagaagc aaagctttgt 420
caggtctacc agagcagctg ataagcctgc agaa 454

<210> 1358
<211> 449
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F11

<400> 1358

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agcagctgac ttctgacaac agtcctttgt cttgaggcgg tgagtatctt ctgtgtttat 120
tatgccagga tttcactgct gactatagat tcttcccaga ctgaggggct gaagatcgat 180
catgtttcaa agagttcttt gaactgggct gtaggctaga gcagagatgt tttctttttc 240
tgatcataaa tacttcaggt tcacaaacta cttcttcata atgccaaaac tggaatgttc 300
tgtagtgggg acattatagc agcatacaca aatgctagga tggaaacatt agtgctggag 360
atgtttgaca gagtgatttg cactacaaat gtaaaacaaa acacaggctt tgacaagaac 420
aaaggattat aaaaacatgc ctaaaaatc 449

<210> 1359
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F12

<400> 1359

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gttgtcgttg gccttcatca gctcctggaa tctagaaagc gcaagaggcc cattcagaag 120
gtagagatgg gaacctcgag tcaaaacgac gtcgacatga gctggattcc tcaggaaact 180
ctgaaccaga tcaataaagc ttcaccaaga aggttgccca ggaaacgggc acagaagaga 240
tcagtgggat ctgatgagta aatgttctt tgtgcaacaa ttcggtcttt acttaaccg 300
ccctaattgtt tttcggcctg atgggaatta gtgcagagaa gccatatcac catagaaggc 360
ggctactact tatgtgtgga ctgagcaatc cgagtctgtg gcgatcatat tgctgaaaat 420

gcactgcatt tatttttcta aagtaac

447

<210> 1360

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F9

<400> 1360

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ggggatatgtc ctgaggctgt gagctttggg tcccatgcag ctgggggaggt ccatacaaac 120

ctggaagtaa accgtgtctg gtttgtaacc ttcgcttccg tgaatagaga ggggtggatta 180

aatggttccc aggaagccct ctgcgattgt tgctcagtca ctcagttgca tccagctctt 240

tgcggtcca tggactgcag cacaccaggt ttcttggtcc ttcaccgtct cctggagctg 300

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<210> 1361

<211> 292

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G10

<400> 1361

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catggcatat gtgggaaagc ggcaggcctg aagcaaacga tggtctggct gtggtaagca 120

gtgtcacagc atccctagtc agtgatcaca gagtcacctg gggtaaaagt ctaggtctca 180

cagtcaaggc aaggattatg aaggtgacac ggcaaagggt gtctgaagggt gctcataatt 240

ttctcaaatt cagtggggaa gggaagggtg gaatgatgtc cttcaaggcc ac 292

<210> 1362

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E12

<400> 1362

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tagaaaataa agtcatatgt tttcttaatt taatattggt cattgctaata cagaacacac 120

tattgccagg aacacagtag ttattgttaa aatcagctgc actagataca atttgaaaat 180

atccagcacc aggttaattc caataacgaa cccaatagat tagttaatgc tatgagaaga 240

ctaaagagaa agagaaaaga gacgcagacc caggcctggc tccacatgct actaactacc 300

agctctcaga tgtgtcactg ggaacaatac aactccatg cgttttgcta catctccaga 360

agaggtaagg acttgagtcc acacggggat gctcgcttgc aagtccttga ggcccacagc 420

ctggtgtgtt tcacgcacag at 442

<210> 1363

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B12

<400> 1363

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gggtttcaga cttgtgttcc tctccctcgt cctcctgtct ccttaggctc agtagaagcg 180

gtggggaccc tctaccagct tcttgagccc tgcctgcagt tggccaccca gcaactgattg 240

gggacaaggg ctgaactgct ggccaccagc cacacctagg aaggagctgg ggccctagaag 300

ctaggcagcc ttcggcctca ggggccgctt cgtgccctcc cagctgggag gggtcgctgt 360

ttcgcttgt ctgtc 375

<210> 1364

<211> 460

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-C10

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gctggacctg caaaacaaca aaataactga gatcaaagat ggagacttta agaacctgaa 120
gaaccttcat aactgatgc tcatacaaca caaaattagc aaaatcagcc ctggggcatt 180
tgctcctttg gtgaaattgg aacgacttta tctttccaag aatcaactga aggaattgcc 240
agagaaaatg cccaaaactc ttcaggagct gcgtgtccat gagaacgaga tcaccaaagt 300
gcgaaagtct gtgttcaatg gattgaacca gatgatcgtc gtagaacttg gcaccaaccc 360
gctgaagagc tcaggcattg aaaatggagc ctttcaggga atgaagaagc tctcctacat 420
ccgcattgct gacacaaata taactaccat ccctcaaggt 460

<210> 1365

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B10

<400> 1365

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accaggactg gactggagga aaggagttca agtgcaaggt caacaacaaa ggctctcgg 120
cccccatcgt gaggatcctc tccaggagca aagggccggc ccgggagccg caggtgtatg 180
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ccggcttcta ccagaagat gtagccgtgg agtggcagag aaaccggcag actgagtcgg 300
aggacaagta catttctaata ttgtaacata caaccatagt ctgcaaaaact attctgtgta 360
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<210> 1366

<211> 276

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H12

<400> 1366

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tcgagtactt gcacgaggta accaaccgc cagtgatcta ccgcgatctc aagggatcca 120
acatcctctt gggcgcaagc ttcaacgcga agctgtcaga cttctgtctg ggcaagcttg 180

gtccgagccg cgacagaacc catgtcatca caaaggggat tgggacctac tgggtactgcg 240
ctccagaatt agccatgact gggaagctga ccaaga 276

<210> 1367
<211> 455
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-A10

<400> 1367

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gtaatacgat gaacagcaaa gcgacccttg gtgtcataga tcaaacgaaa gttctctcca 180
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ttgccatcga tcttaatgaa acgctgcatg caaatcttct ttacttcac tccagttagg 300
gcataactaa gtctattcct taggaaaatg attaggggga gacactccct tagcttgtgg 360
gggccggtag atggacgagg ggcaaacacg ccggtcagtt tatccagcat ccaatgtttt 420
ggacctgcta ctctgtctcag gtacaaaatg gcac 455

<210> 1368
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-A12

<400> 1368

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tttatagaag ctctgcgacc ttgtcatgtg acatgtggaa gcagtctgaa ctgttgcagt 120
ccatcagctt agctcatttc aggtgagcca gcagccatac cttggtcccc ctgagaaggt 180
cagtcagaga ctttgggtca aagttcctac ctttctgaac attctttttc tcccaaggac 240
attcacaaat agctacttga atgtatgatc atgttcaccc agtccaggca gaaatgggga 300
cgccgttggc agggagtatt ctgactccct ttccgtggct gcaagtggtc tccagaaata 360
aagggcatgg cctggacagc gttcaatcaa ctctggggg caaaggacaa actgccccaa 420

<210> 1369
 <211> 277
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-A4

 <400> 1369

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 gttacatcta agttttactac aggtagggat atatgaatcc ttgaaatata atgtaccata 120
 cctcaagtag aatgccatga tatcaggcat cctgtttcca cgcatataac atgaggatta 180
 cgtggacgat tctgatgcta catacacata cgtagctaca caagacgggc taatcaaatt 240
 cacccatcat caatcaacct aagaacggca tttcatt 277

<210> 1370
 <211> 446
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-A5

 <400> 1370

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 gctggcgcac tgccatgcgc gcggggtgat gcaccgggac atcaagtgcg ccaacctgct 120
 ggtgaacaac agcggcgagc tcaaggtggc ggacttcggg ctggcgaacc tcttcgcgcc 180
 ggcgccggcg gcgccgtca ccagccgggt ggtaacgctc tggtaaccgc cgccggagct 240
 gtccttgggc gccacggcgt acgagccctc cgtcgacctc tggagcgccg gctgcgtctt 300
 cgcgagatg cagcgcgcc ggcccgctct gcagggccgc accgaggctg agcagatcaa 360
 aagatcttca agccccggtg gccaccgcc caaggacttc tggggccgct tggggctctc 420
 ccacggcgcc gtcttccgcc cgcagc 446

<210> 1371
 <211> 401
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-019-Q1-E1-F9

<400> 1371

ttcacggggc cacgcacgcg tccgcatcag gcttggttac aatagcttgg gtgcgtttgc 60
caccatcaat cacctccact ttcaggcgta ctacttgta gtgcctttcc ctgttgagaa 120
ggcagctacc cacaagatcc cactctctga ggacacgaag aagaatgggg tgaccgtgtc 180
caagctgata aattatcctg tgagaggcct ggtatttgag ggagggaaca ccctggacga 240
cctggccact gtggtttcta atgcttgcat ttggctgcaa gacaacaatg tgccttacia 300
tgtgctcatt tctgactgtg gcaagagggt tttcctgttc cccagtgct acgcagagaa 360
gcaggctctg ggtgaagtga gccaggagct gctggacact c 401

<210> 1372

<211> 236

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G1

<400> 1372

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ctcgtccacg gcgggtcatg cggggccccc aggggtgtcg cgggtcccaa cagcagtacc 120
agctacaatc tggaaatggt tcacggggac cgccacctgc tacggtcagc ccaacgggtgc 180
cggcgtcct gacaccggcg gtgcgtgctg tctcaagaac gtcaacctgt caccct 236

<210> 1373

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G11

<400> 1373

acaacaccct ataatgacgt cgtactaccg ccggccaaca actcagccgc cgcaaccgcc 60
acatcagcca tgggcgcttg cgcaaccaag cccaagacgc ttgaggggca ggccccagct 120
gaggccgcg tctccacacc caagggttgcg cccgaggcca ctccaatctc cgttgaggtt 180
gcggctgatg aacaggtagc tgagaagggt gtgggtggagg agccggctgc ggccggccgac 240
gttgagcatc agaaggctaa tgagggtgtc gctccagagg cggccgtcgc cgagccccgat 300

cacaaagagg aggaagccgt ggagaagacc gtcgt

335

<210> 1374

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G2

<400> 1374

cgctccggtcc tatctccatc ggccatctct ggcgcatgat cgaaccgcac gaccgaggca 60

gcaagtgagt ctacagacacc accatgcagg cgatgcgtcc ggccgcggag ggggaggcac 120

aggagcaggc ggtgagggcg gaggcggacg aggtgaagag ggaggtggcg aaggcgcacg 180

acgaggagga ggcggtgcct gaggagaaag acgtggcggg ttagggggag gaggtggagg 240

cggaggcgga gacggagaca gagactgaag gcgaggcgga ggcagaggtc gaggccgagg 300

tggaggtcga ggtggaggcg gaggccggtg catcgtctgc gaagaagaac cgtatccagg 360

tgtccaccaa caagaagccg ctctatttc 389

<210> 1375

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G4

<400> 1375

gggccgcgtc cagcgagatc caaggaccgg ttcaagaggg agctggatgg cattcagggtg 60

gagctacaag caaccgaccc gagegaaatg agcatggaca tcgtcaagtc gcgagccctc 120

tgaaacagcc ccggccgctg cacctgcacg ctgcaggggc gcatcggctc ctgcatgccc 180

gtgggtcgtc gaatccttgc ttgtgtgttg ggaacggtct tgtgttttcg tgtccttggt 240

ttcctggaag caaaagccct gcattctgta tgagactgta tgccattttc catctttttc 300

tctccccata tctctgccct agtctgcta ccgctgtaga ctagaactta tttgggtgtt 360

gatctcgtgg cattgtcgag tcttttatgt gtctatgcaa tgcta 405

<210> 1376

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H10

<400> 1376

acgcgtccgc atcgagcccc acccgacgcg acgattcctc tcctccgccc gttcccaccg 60
atctcacgct ctctctctct tcctccgtcg cgtcgggtcg gcgtcgccat cgccggccat 120
gggttgcggt ggctccaagg aggcctgggc caccggcaac accagcgccg gcagcaaggt 180
cctccggagg aagccctcct ccgtctccac cggcgcaagc cacacatcca ccacgtcgcc 240
gtcgtcctcc ggcgtcgtcg tcaaggacgt cgtgaaggat gcggcggcgg ccggcgaggt 300
gatgacgcc gccgacgcc agaagcctat ctctgtcgac cccaaggag acgccatcgt 360
ggtgatgggc gccaaagaaag aaggggg 387

<210> 1377

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E12

<400> 1377

tacaagactc tatacagacg tcgtagtatc gtgcatggtg agaaggaaga gtcaaagggc 60
atcgatgcga aagcgtccgg gcctggtggg tccttcgaca tcaccaagtt gggcgccctc 120
ggcaatggca agacagacag cacgaaggct gtgcaggagg catgggcacg ggcgtgcggc 180
ggcactggga agcagacaat cctcataccc aagggcgact tccttgtcgg acaactcaac 240
ttcacaggcc cttgcaaggg cgacgtgacc atccagggtg atggcaatct gctggcgacc 300
acggacctaa gccagtacaa ggaacatggt aattggatcg agattctacg cgtggataac 360
ctggtcatca ccggcaaagg aaaccttgac gggcaaggcc ca 402

<210> 1378

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-F10

<400> 1378

ttcacgggtg cacgcacgcg tccgcacgtc tcaccctccc tccctcacac aaataataag 60
gaaagggtccc gcccttttcc tccgacatcc acagggggga ggggaaaaca cgtgcattca 120
cccggcggca ataatggcct cggttccggc tccggcgacg acgaccgccg ccgtaatcct 180
atgcctatgc gtcgtcctct cctgtgccgc ggctgacgac cccaacctcc ccgactacgt 240
catccagggc cgcgtgtact gcgacacctg ccgcgccggg ttcgtgacca acgtcaccga 300
gtacatcgcg ggcgccaagg tgaggctgga gtgcaggcac ttcggcaccg gcaagctcga 360
gcgcgccatc gacgggggtca ccgacgcgac cgggacctac acg 403

<210> 1379

<211> 334

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-019-Q1-E1-F3

<400> 1379

ccaacacgga tggcatccac atggggcgact catccgggat cacgatcacc aacaccgtca 60
ttggcgtcgg tgacgactgc atctccatcg gccccgggac ctccaagggtg aacatcaccg 120
gcgtgacctg cggccctggc cacggcatca gcacggcgag cctangggcg tacaaggacg 180
agaaggacgt cacggacatc aacgtcaagg attgcactct taagaagacg atgttcggcg 240
tccgcatcaa ggcgtacgag gacgccgcct ccgtgctcac cgtctccaag atccactacg 300
agaatatcaa gatggaggac tcagccaacc ccat 334

<210> 1380

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-F4

<400> 1380

gggtcgagga cgcgtccgat ttttcaagct tttctctaac ggaatgaaaa aaccgggttaa 60
aaaacatgca accctaaaaa ttacggaccc aaaggaaacg gccctcaggg accttttaaac 120
cttaagggtat agtggaaagt ttggaactac tgagcccact cttctgctgg atatcttgat 180
ggctgccgac aaatttgagg ttgtttcatg catgaggtac tgcagccagt tgctcacaag 240

cttgccgatg accacagaat ctgcacttct ctacctagat ctcccttgct caatttcaat 300
 ggcagcagca gttcaacctc tgacagatgc agctaaggat ttccttgctg taaaatacaa 360
 ggatttgact aagttccaag atgaagtgat gaacattcct 400

<210> 1381
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-019-Q1-E1-E1
 <400> 1381

ggtcgagccc gcgtccggag atactggacg tcgcaaaatc acctcgttcc gtcagcagcg 60
 gaaaccaaag tcaggattcc gttatgcttc gcgggagaga gaagtcgtga ttacagtcga 120
 gcatggagcc acgggcattc cccacccaa ccgcggcatc tgccagtctg cgacactgcc 180
 gcccagcag tggggcaaac actgtcgtcg gcgccttgga gctttggatt ggctgggcgc 240
 gcgaccggcc tctgtctcca ggctgcgagg cagcagcaac ctccctcgct ggctgatgac 300
 cgtcttcgcc gcggatccaa ctcccaacgt ggtcggcttg cttcccgctg tcaccattgt 360
 gaggtcacga ggatttgaag aatcacctcg gtaactggga tct 403

<210> 1382
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-019-Q1-E1-C3
 <400> 1382

gtccagcacc aggactttgc tcgcataccc tctccatcct tgtgaatgat tgccttggtg 60
 ttctcaacat tgtaacagga gtctttgctc gcaggggcta caatatacag agccttgctg 120
 ttggctcagc tgagaaggaa ggcatttcac gtattacaac agttgttcct ggtactgttg 180
 aatccattgg gaagttagtt cagcagcttt acaagcttat tgatgtgcat gaagttcatg 240
 acattacca ctcacctttt gctgaaaggg agctgatgct tattaaagtt tctgtaaaca 300
 ctgctgctcg gagggaaatt ctagatattg ctgaaatctt ccgagcaaaa cctattgacg 360
 tttctgacca tacagtaacc cttcagctta ctggaga 397

<210> 1383
<211> 309
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C9

<400> 1383

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gtcctacgcc cccgcgcgct aagacgacga aggcctcgtt ttctcctcgt ggtctgacca 120
tccaatccaa actcaaaaga acaaatacga aagaaacgta gtgaagggga acaaataaat 180
gggtatatgt aatcttgaga tgcattgcct ctcaaacac tgtactgggg ttctcaaaaa 240
aaacattgtg atgggaggtt tatatataac tttatctcac catttattta caccaacaag 300
tcattgggt 309

<210> 1384
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-D10

<400> 1384

acgcgtccga acaccatcgc cttcaaccac ttccgagag gcctcgtgca gaggatgcc 60
aggtgccgct ggggcttctt ccacgtgggtc aacaacgact acacgcactg gctcatgtac 120
gccatcggcg gcagcaaggc cccaccatc atcagccagg gcaaccgcta catcgcgcg 180
cccaaccttg ccgcgaagca ggtcaccaag cagcatgaca cgccggagtc cgtgtggaag 240
aactgggtgt ggcactccga gaacgacctc ttcatggagg gcgcctactt caccgtcacc 300
ggcgccaga tcaacagaca gttcaacaag aaggacctca tcaagcccag gaacgggtcc 360
tacgtcacca agctcacgcg ct 382

<210> 1385
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-D12

<400> 1385
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ccggcccgggt cgcccggagt agcaagcgtc tccgatccga tccatcgtgc gagcatatcc 120
acggcgatgg aggcgagagc ggccatgagc tggtagtgcg gctcccttct ggccgtggcc 180
atcgcgctgt tctgtccgt gtcctcctggc gtgcgcgccg ccggcgccgg cgccggcgtc 240
gacatcaagg tgtcgtgtgc agcgacgccg gacccggacg tgtgcctgcg cgcgctccag 300
gcggaacagc actccaagac cccgcgggac ctggcggaag cgcgctccg cgcgggcgacg 360
accgcgggcg gcgcggcggg cgact 385

<210> 1386
<211> 349
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-019-Q1-E1-D7

<400> 1386
tacacgcctc tacactgagt ctgataaacc gacttcatgc gcgcgttccg cgaacatttc 60
gccgactacc tcggtaacac catcgtggac atccaagtcg gcatgggccc cgccggcaag 120
ctgctctacc cgtcctaccc ggagagcacc ggcacctgaa agttcccagg catcggcgcc 180
ttccagtgta ccgtcaggta gatgcgtagc cgcttgcaag cagtacctga agcggacggt 240
caacctgagt gggggcacgg taggccaacc gacgctggtg gctacaacaa ctggccggga 300
tacatagtct tcttccgcgg cgaaaaccgt gggtaggagca ccgattact 349

<210> 1387
<211> 403
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-019-Q1-E1-D8

<400> 1387
ctcgcgggtc gacacacgcc tctacacaca cgcttgcaa cgattcctct cctccgcccg 60
ttcccaccga tctcacgtc tctctctctt cctccgtcgc gtcgggtcgg cgtcgccatc 120
gccggccatg ggttgcggtg gctccaagga ggccgtggcc accggcaaca ccagcgccgg 180

cagcaaggtc ctccggagga agccctcctc cgtctccacc ggcgcaagcc acacatccac 240
cacgtcgccg tcgtcctccg gcgtcgtcgt caaggacgtc gtgaaggatg cggcgggcggc 300
cggcgagggtg atgacgcccc cgcacgccga gaagcctatc tctgtcgacc ccaaggcaga 360
cgccatcgtg gtgatggacg ccaagaaaga agaaggcaac aac 403

<210> 1388
<211> 381
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-019-Q1-E1-C11

<400> 1388

ggtccacgac gcgtccgcat cctattcccc cccgctaaaa cccacccaac cgccgcgcgc 60
cgccggcggc gcaagggacc cacgatggcc atgcaggtgg tgcgcaacct cgacctggac 120
cggtagcgcg ggcggtggtg gtgaacgaga cgtgggccga cgggcgccgc ggccacatcg 180
aaggcacngc ctggcgcgcc gaccctgcc a gcgacgaggc caagctcaag gttcgtttct 240
acgtgccgcc ctctctcccc ctcatcccc tcaccggcga ctactgggtg ctccacatcg 300
acgccgacta ccagtacgcg ctctcggggc agccctccag gaactacctc cggatccttt 360
gcangcagcc tcacatggac g 381

<210> 1389
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-B12

<400> 1389

cacgcgtccg cacacgcgtc cgcgcgtcta ttgcgacacc tgccgcgccg ggttcgtgac 60
caatgtcacc gagtacatcg cgggcgccaa ggtgaggctg gagtgcgaagc acttcggcac 120
cggcaagctc gagcgtccca tcgacggggt gaccgacggg aacggcacgt acacgatcga 180
gctcaaggac agccacgagg aggacatctg cgaggtggtc ttggtggaga gcccgcgcaa 240
ggactgcgac caggtgcagg cggacagggc cgcgcgccgc gtctgtctca ccaggaacgt 300

cgggcatcagc gacaacctgc gccccgccaa cccgctcggc tacctcaagg acgtgccgct 360
gcccattctgc gcctcgctgc tcaaacagtt ggactcggac gacgacgacg a 411

<210> 1390
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-B3

<400> 1390

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tggtgttcgg cctcctcgcc cacaatcgcg gcgaaaggca gtccgccatg ggctcgccg 120
tcggctgtca aattcacggg tccggtcattg atgccaaggc tttcccgccct tgctgctcct 180
ctcggaggcg cgtccacagg tcacggcggc ggacgggtgg gcggggtac ggtgcgagt 240
caacccgagt cagggtcggg tttcccgagg ccgtcgccct ctgctctcgc cgctccgggtg 300
gatgatggag cgcgtcggcg tcggcgctgt tggatccctc tctttgcgcy gctgaggatg 360
ggttgaggcg acagcgaccg aa 382

<210> 1391
<211> 347
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-B9

<400> 1391

acgcgtccga aaagcattcg gaacaacaag accaagggtat tatgcaccaa cgcccaaggg 60
aagaacaaag ggtgggtcca aggggcttga aggggtttaa aacccccctg aatgggacca 120
ccccccccag taaaaatttt tccccgccct gtgaattgcc ccaaaaaggg gtccactggg 180
gagccccaca cattaacgcc aaaaaacccc cagccaaata agttctaccg ggggagaacc 240
cccaattttt ggggggaaaa ttaatttccc aaaaacaacc aaaatcaagg ggtgaaaaaa 300
caaaaaaaaa aagaaaaaaaa aaaggggggc gccccaaaag attcaaa 347

<210> 1392
<211> 409
<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-H10

<400> 1392

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ccgccccgcc cgccccgcc tccgccccgc cgcattgagac ggggtcggca cggggcgatg 120

aggagcagcg aggccatgga gctcctgggc ttccctcgct actccaggcc ctcccccttc 180

gaggtgaagg ctgcgtatag aagaatggtg atggagtccc atcctgatcg tgtctcaacg 240

catctgaaat cgcacgctga gtcaacattc aaggagatag cagaagcata ttcatgtttg 300

aaggacggaa gaagatcagg gagtangatg gaacttcattg ttatgcgttc tgggtgttcaa 360

ctagccacgg aagatcaaata agaacgttgg gtacagcccc gtttctact 409

<210> 1393

<211> 281

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-H12

<400> 1393

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ttttcttttg ccttcttttt gtgaaaacgt gtgcttagcg acaatgctgg caaagtgtta 120

gaagcatctc tggaatgctt cgtgtagtat cttttgactc tcttttcttt tgtcgtctca 180

atcatgttac atgagaaatg cctgatggac tcaaataatg aaccggtgat tcaaaaacca 240

aaagcctctg atgaatctat ttgagggttt ggatcttgat c 281

<210> 1394

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-F2

<400> 1394

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gcacggccgc atccgcggca cgccgcgccg catcccgatgc ccgcgcaaaa ccggatccgc 120

cgccgccatg gcggtggacc gcgtggacgg cgaggaggcg ttcgaggagg tggacccgac 180
 ggggcggttc gggcggtacg cggacgtgct ggggctcggg tccgtcaaga aggtgtaccg 240
 cgggttcgac caggaggagg ggatcgaggt ggcgtggaac cgtgtccggc tgcggtcgct 300
 ggccgaccgc gacc'ccggca tgggtggagcg cctccacgcc gaggtgcgcc tcctccgctc 360
 gctcagccac gaccacatca tcggcttcca caaggtgtgg ctggaccgcg acgccgggggt 420

<210> 1395
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-F3

<400> 1395

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 cggcggtggc tacgaccact gcatggcgct gctggggcgcc gacccgcgca gcaaggacgc 120
 cggcaacaag aacatgcacg ggctggcggt gctggccacc aggatggcca tctaccacgc 180
 cgccagcacc gagtccaaga tcgacgacct cacggagctg gacgcggcgt cgtcggatcc 240
 gcaggctcgc gcccgttcca accactgcct gtagcagtac ggcggtgccg ccgacctcct 300
 ccgcgactcg ctggacaacc tcaaagcgaa tatctactgc atagccatgg agcatctgac 360
 cgccgcaatg ggcgctccg agagctgcga agacgcgtcg aacggccagg aggaagatgt 420
 ccccgctgcc gct 433

<210> 1396
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-F4

<400> 1396

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 ctgctcgccg tctctctctc tctccctcgg ggcgcgcgcg cgcgggagac aggccaaccg 120
 atcgccaggc cggcagccat gggcaagcac ggcaagtga gccacgacgt ggaggcgtgc 180
 taccgcgccg gggcagcggg cggcggcaag taccgtaca tgacggagaa cccgcagctg 240

cggtgggcct tcatccgcaa ggtgtacgtg atcgtgtgcc tgcagctgct gctgacggtg 300
gccgtcgccg cgacgggtgaa cctgggtgcgc gccatcgagg acttcttctt ctcccgccacc 360
atgggcgcca tgttcgccat catccgggtc atcgtcggcg ccatactcgt gatgatcccg 420
atgatcagtt accggaagcg gcaaccc 447

<210> 1397
<211> 112
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-018-Q1-E1-C11
<400> 1397

ctaagacata aggaactacg tatgtttatg gaactttctt taagccatat atttctcagc 60
atgagaatga catcgaccga aatcgtcttg agctcagaac tcgaaccaac ga 112

<210> 1398
<211> 98
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-017-Q1-E1-H9
<400> 1398

cggtccgata ctcacgggtg gcacacgcgt ccgaaataaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa gggaggaagc aaaaaagaga aaaaaaca 98

<210> 1399
<211> 456
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-018-Q1-E1-A11
<400> 1399

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ggaactttct ttaagccata tatttctcag catgagaatg aaatcgaccg aaatcttctt 120
gagctcagag ctcgagccac cgatatggtt gtcctttact tccataaggc tgcttcggta 180
gggcaaaata ctttctttga cgttttaaaa tatgttgctg cccagtcccc ttctcggaaa 240

tcaaggctgc accctcatca ggaaccacag cagcagcaac cacaagtgca ggtggagctg 300
cagcagcaac cacaagtgca tgtggagctg cagcagccgc aaccacaaaa acaagcagca 360
cctgttatgc gcagaggagc atctattgct ggtcggcaag cagcaatggg acagcagtct 420
ctggagacta taccggttcc atcttcaccc aagata 456

<210> 1400
<211> 483
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-G11

<400> 1400

ggtcgccgca cgcgtccgca tacaaccat ccttaaaacc caaaacatca cctccatctc 60
gctaaggctc aggtttctca agagcagctg ctgtagctgc tctatcctct gttgctgact 120
gctgagcaat ctggatcttc agaatttcta cgatccaaag ctagcaaacac agcatataag 180
actgatgtcg accggattgt cataactcca gctggcccat caggcccatc ttctcctcag 240
tctgaagctg gggagtcгаа tgtgtttcac caggaaaaag atgctgcagc agatggggca 300
ccgcctgaca ctgatggagc agtggctgag gccggagagg aagaaacaac ggaaaatggt 360
ggtgaagcga catttagcta tgaccgcttg atatccaaat ccaccgattc agttcgtggg 420
atagattaca aacgcagaga ggcatactta tcagatagtg aattccaaac tgtttttggc 480
atg 483

<210> 1401
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-G12

<400> 1401

cccagtcagg atcctcctaa tcccggctcc gttccaccaa cccccgcccg gagaacaaac 60
aacttggggc ccaccggaga acgggtcaac aaaggccaac caaggttgca agccccgaag 120
tatcgacgcc ggcaaggcct tgggccgccc cgcgggcgtg ctcatcaacg gcaagggcgg 180
caaggacctg taggccgcgc ctgccttcac cttcgaggcc ggcaagacgt accgcctccg 240

cgtctgcaac accgggatca acgcgctcgt caaacttccg catccaaggc cactacatta 300
aactgggtcca actggaaggc tcccacaacc tgcagaacac gttcgactcc ct 352

<210> 1402
<211> 236
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-H10

<400> 1402

aaacactgtc aaacaaaaat aattttacca aggaaaacgg aaacggaacc aagaaggaca 60
acaacaacaa taacatctta accgttgaat tgccccaag gttctctcca accccaaacc 120
tgtcttcac aataaagggt cccgcttcat tgggaaacca aaccctacc gtacgtgcct 180
tcggaagggt aaagcgacag gcagaactaa ctacaccggc aaaaccaacg agcatc 236

<210> 1403
<211> 425
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-017-Q1-E1-H12

<400> 1403

tcgccaagc cttcgccgac gccttgcccc gggcctcccc tttccgcaac aacaaattca 60
accaagcaac caaaatgttc ccccttaaaa ctgccggggc cctttaaaat ccccgctttt 120
gcggccctaa ccccggccaa ggccccggaa aattcaccga aggaaggcag tgctgcaaag 180
gcacctgagg ctgcaaagag aactgctgcc cccgctgaag caccgggagc cgcgtccacc 240
cccgtcgccg ccgctggccc atcatcgctg tctaggaagt ctggtccagc taccgcgcca 300
gccaccgcct ctacaccccc ttcttccacn gacgaggagt tgagcccttc cccgccagca 360
tccaccgcg cggcgttccc tgcggctgan ggaacggctg ctgatgactc cgcggtgctg 420
ctgcc 425

<210> 1404
<211> 402
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-G10

<400> 1404

gggtccacca cgcgtccgac agcgcacggg gacagcccca acacggacgg catccacatg 60

ggcgactcgt ccgggggtcac catcaccaac accgtcatcg gcgtcggcga cgactgcatc 120

tccatcggcc ccgggacctc caaggtgaac atcaccggcg tgacctgcgg ccccgccac 180

ggcatcagca tcggcagcct aaggcgggtac aaggacgaga aggacgtcac ggatatcaac 240

gtcaaggact gcacgcttaa gaagacggcc aatggcgctc gcatcaaggc atatgaggac 300

gctgcctccg tgctcaccgc ctccaagatc cactatgaga atatcaagat ggaggactcc 360

gggctacca tcatcatcga catgaagtac tgccccaaca ag 402

<210> 1405

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-G1

<400> 1405

gcgggtcgac acaagcctct agagtgagtc gactaagca accagcttgc tcgaccgcgc 60

ccgtcattct gcgacaccgc cgttccattc cgtcgcgccc tccaacggca ctcgggcagt 120

cagggatgga gatgaagaag atcaccggcc ccgtcctcgt gccaccgcg gaggtcaccg 180

gtaccacgc cgccagaagc gccaatccga gcctcatgac ctggaccgcc atcgtcacga 240

tcgtcgtctg cgctccctc tcgaccgacg tctgctacat ctgcttctag tacatgcagt 300

caacggcatg ctgcgacgcg tggcccaagc tcaaagcagc gtgacagata 350

<210> 1406

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-E11

<400> 1406

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acaagggcgt ctgcaatttg tgattctaaa accaatcctg ggcgttaaca ctttcataact 120
 ttacgcaaaa gggaaatatg aagatggaaa cttcagtgtc aaccagtcct atctatacat 180
 aactatcatc tataacaatct cataactctac ggcattgttt gctcttgacac tgttctatgc 240
 ggcattgcaga gatctacttc agccatataa ccctgtcccg aagtttatca taatcaaatac 300
 agttgtgttt ccaacgtatt ggcaagggtg gctgggttttc cctgctgcaa aatctggggtt 360
 cataaaaaat gccgagaaag ctgcatatct ccagaacttc gtgctatgtg ttgagatgct 420
 catagcagcc attgggcacc gattttcctt ctctctac 457

<210> 1407

<211> 137

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-E12

<400> 1407

gtttcacaat ttatccttcc ccacaggtgt caacagctgt tgtaaagcca tacaacagtg 60
 tctctcgcac ccactccttg ctgcagcaca ctgatgttgc agtcctcctg gacaacgagg 120
 ctatctatga catatgc 137

<210> 1408

<211> 347

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-E2

<400> 1408

caacacccaa gagtgagtcg gattagtggc gatgaggtcg tccgtggccc gcctgattcg 60
 ctctctctct gcctcgcctt cactctcag tggaaatgca ttcttcggca atgccagacc 120
 cagtgatcag aggcacattg agaagccttt taaagtgaag gaggcagaac ctgtgaatgt 180
 gacaaaacct tcaccacaca agctgctggg tctaggagga agtggtttcg ttggatcaca 240
 cgtttgcaaa gaggttttgg acaaaggtct aggtgtctct agtcgtaata gatcgggaaa 300
 gccatcctta aatgaacctt gggctgacaa agttatatgg aaccaag 347

<210> 1409

<211> 467
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-017-Q1-E1-C10

 <400> 1409

 gcgtctgctc aaccacccgc cgccgatgga tgtggatttg gacgaggcca ccgccacccc 60
 ggctcgggcc tctgcaaagc ccgcttccaa cggcgaggcc ccctccggcg cccgcgaggt 120
 ggatgtcggc gaggagtaca cgctcgccgg cgttctgcgc agcttcgtcg acggcgtctg 180
 gtacccggac gagccgctgc tccggcggct ccggcgggcg tcttgcaag gcgcgccgcg 240
 gctgaagggg gcgtctcgga actcagcgcg ggatctgctc gagtgggcaa ggcaaggcag 300
 cggcctccgc gccatcctcg tcatctcggt ccggacaatc atgcctatan cattgactgg 360
 cttttaatc ttcattgttct ttctgctaata tgccactgcc aatgcgatca tcgtctcagc 420
 cctgatgtca ctggccgctg ctggcggatt cttggctatc ttctttg 467

<210> 1410
 <211> 313
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-017-Q1-E1-C11

 <400> 1410

 gaagagagcg gcggagagcg gcgaagcggc cgaggcgaag aagattcagg acgacttctg 60
 ctgcagctg tgcaaggca agaaggggac ggacctggtc gtgtgcaaag agtcctgcgc 120
 gctctcccag cagtccaacc tgggtgctgta cggcaggatt cagtgcgaag gcaaatgcac 180
 cgagcagaag ggcatacagg cgccgggcat gaaggtctgc caagaggagt gcgacaaggc 240
 gtacgtgggtg aaggcggccg aagtcaccaa ggctgcagc gtcacctgcg ccaaggagaa 300
 gaacccgcgc ctc 313

<210> 1411
 <211> 246
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-017-Q1-E1-A12

<400> 1411

ccggttgcat ccaccaaagtg gtggatattg gatattgaaa agttgggggtc acaatttttg 60
ttcccatagt cgtcacgatt agccatctgt caaagtactc cctctcttcg ttgaataagg 120
tctattgtca tttttatcac aactgcggt atttagatga ataatacaca agcatttgag 180
gattcaaata gaccaatcct gtgcaaagtg tcgtactctg agaatatagc accagagtgn 240
tacatc 246

<210> 1412

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-B11

<400> 1412

cccgcccttt cactgccctc ccctcaacaa cattaagggtc cccccctttc cgacattcac 60
acgtgggaca ggaaatcacc ggccatggcc tcaattccgg cgacgacctt cgccgtcatc 120
ttatccgtcc tcttctgtgc cgcggtggc accgccgtcg acaacgacct ccccgactac 180
gtcatctact gccggtcta ttgcgacacc tgcgcgccg gggtcgtgac caatgtcacc 240
gagtacatcg cgggcgccaa ggtgacgctg cactgcaaac acttcggcat ccggaacctc 300
gagcgtcca tcatacgggt gaccgactgg aactgcacgt acacgatcga gctcaaggac 360
agccacgatg acgacatctg cgacgtggtc ttggaggaca gcccgcgcaa ggactgcgac 420
caggtgcatg cagacacgga ccgca 445

<210> 1413

<211> 185

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-B12

<400> 1413

gcgtccgccc acgcatccgc ccacccttcg gccaaagcctt cgggggcaaa atgcctccgt 60
aacttcggag gtcacaaca ttggaaaatc tgacatggac cggctcttagc ctcgcggaaa 120

aaaattgtaa cttttgtaag caagagccac ttctttgaat atatgacct aacaacgctg 180
ccctt 185

<210> 1414
<211> 385
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-017-Q1-E1-A11

<400> 1414

cttaattaca ggccaaacct aaccaggcct gacaggattt cttggaaaac atacttcaat 60
aaccacctca tgtgcgaaat caagggccac cacctgacct ccgctgccat agtcggccac 120
aacggcgctt tttggggcca gagcaccgca ttcccacagt tcaagacaga ggagatgacc 180
aacatcatga aggacttcga cgagcccggt ttcttggtcc cgaccggcct cttcctcggc 240
cccaccaagt acatggtcat ccaaggcgag cccggcgctg tcatccgcgg gaagaaggga 300
tctggangca taactgtgaa gaagacaagg caagcgatgg tggtcggcat ctacgacgag 360
cccatgaccc ccggccagtg caaca 385

<210> 1415
<211> 347
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-H1

<400> 1415

actggagtgc aacgtccaaa ttgcatacat tgcttgatc gcacacatgt tgctcagtat 60
gcatatggac ttgctgcttt ggggaggcaa cttcatgcaa tgggactgac agatgtttta 120
aaaatccacc ctgatagcag cattgcttct gctttgatgg aaatgtacca gagcatgggt 180
gatgcacttg ctcatcagta tggaggatct gcgggacata acacggtttt ccctgagagg 240
caagggaaat ggaaagctac tactcaatct cgggagttcc tgaaatcaat taaacggtat 300
tacagtcatg cctacactga tggtgagaac caagatgcta taaatct 347

<210> 1416
<211> 278

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-H10

 <400> 1416

 gcacacgttg agatggttgt ggctttggtg ttcttggtcc tatgcttcat ggtgcggtcc 60
 tccgactctc gcccacatgca tgtccatcac tgtcacttag tgcacagggg gtgctggtcg 120
 ctaatctgat atctgtatgg cgggcctacc ggctgcctgt cgcgactata ttcgtgtgct 180
 gctgcgggta caccgacgtt aacaatcccc ccttcaagag catgggacga tgtggcaata 240
 tccgcaatct tcaaggattg tctgggttgt gggtcctg 278

<210> 1417
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-H4

 <400> 1417

 caagtatgcc acatgttttg actgcgccga tcagctgaaa tcgagcggca tgagctgccc 60
 aatctgtcaa tctcctattg atgatgttgt tctggcgagg ttgaattttt gagcttagaa 120
 tttaggaaaag gccaaagagaa aaagagccgg cactcccaga tttagacgtg gagtttgcca 180
 agccctgggtt ttgaggcggc ttcttacctt tttgcttaac caccactaaa gaaatacgag 240
 ctagttcttg gagaaaatgt aaatatgttt ttttggcgca agagcgggtg gcttgtatcg 300
 cactaaagga aaacagagtt caaataaaat gccggttgta atccccgtaa gttccacatc 360
 acttgttcac ggagagaatg ta 382

<210> 1418
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-H6

 <400> 1418

 acgcgtccag gcgtcaagtg cggcccaggc cacggcatca gcgtcggcag cctggggcgc 60
 tacaaggacg agaaggacgt ggaagacgtg caggtgacgg ggtgcacgat cgccggcacc 120

acgaacggcc tgcgcatcaa gtcgtacgag gactccaagt cgtcgtcaa ggccagcaag 180
 ttctgtacg agggcatcac catggacaat gtctcctacc ccatcatcat cgaccagaag 240
 tactgcccc acaacatctg cgtcaagtcc ggcgctcca aggtggccgt caacgacgtc 300
 gtcttcaaga acatccacgg cacctccaac acgccggagg ccatcacgct caactgcgcc 360
 aacaacctgc catgccaggg cgtgcagctc gtcaacgtcg acatcaagta c 411

<210> 1419
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G4

<400> 1419

acgcggccaa cccgcccccc aagcccaccc agcgcgacga agctgggggg cgatcgctcc 60
 agcgcgcgag ggcacatcgc cccgggagcc gccggcggtg acccgctctc tgtcccgctt 120
 caacgaaccc tcaggtccaa gtagttcgtt tcgtgagtta tccacagttg cgccgcaatg 180
 atgagtactg ctaatcgcta ccaacacatc aggtcaacta agcctgttgt aggcaacgca 240
 ataaaattga aggatctcat gataaacagt gacaatacga tatgtgctga ctgtggtgca 300
 cctgatccca tatgggcacg tgctaataatt ggagtgtttc tttgcttaaa atgtggagat 360
 gttcatacgg gacttggacc tgacatctca aacgttttat ctgtaac 407

<210> 1420
 <211> 205
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E7

<400> 1420

cgcgtccagt ggaggcggtg tccaatgcct gtggaacgct gtgtactaaa cggacatcag 60
 ccccaggtgt tcatccactc cgttcactcc tctgtgctct ccgcggtcag gaacttcggc 120
 aacttcatga aggtgctcat catccaggac aagatcagca gagctctgag tccgtcgggtg 180
 gatgacatca ccaagtaggc agaca 205

<210> 1421
 <211> 310
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-F10

 <400> 1421

 acgcgtccgg gatgccagtg cggctctgaca tgctcactga cacttttggg tttggccggg 60
 tcatacatga tggcctcatg ttcaagcatg acttctccat taggtccggt gatattgggg 120
 ctgataggac ggcattctagg gagacactga tgaaccattt gcaggaaacg gcacttaatc 180
 atgtgaagac cgctgggctg ctatgtgatg gattcggctc cacaccagag atgagtatac 240
 gggacttatt ctgggtgggt agccagatcc aggctatcgt ccagcgttat ccatgctggg 300
 gtgatactgt 310

<210> 1422
 <211> 398
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-F2

 <400> 1422

 ccacgcggcc aattcgcttc ttcattctttc tatatacata tatagaccta ataagaacaa 60
 agacgtacga taacctgctt attttgcgac ccatcccgtt cccacgcaaa ggcgccgagc 120
 gtgatctccg tccgtgccgc catggcctcg caccggggcg tgctgctgct gtcctctgcc 180
 gccgcgctcg tcgctgcgct ggcctctgtc gcatccgccg acgacgcaa cgccatgccc 240
 accatcctga cccccgtggc gcataccccg ctgggggtcct tcgacggcga caagccggcc 300
 tctgacgacg acgccgtcga cgacgacgag gacgccgccc ctgtcggcgc gcccaacggg 360
 gccaccatga ctgaacccaa gggacgacgt cctcgccc 398

<210> 1423
 <211> 189
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-F4

 <400> 1423

ggcactgcgg cgctccggcg atctccggtc acctacactg cattggccgc gacgacaccg 60
 gtcttctctc ggggcgatcg gcggttggtg gcacgtgcgt actgggagtt cttcatgagc 120
 tggatttccc atatgtctct gtcgcacggc gaccgcctcc tgcgggtggt cacggtcgtc 180
 ttcaccggg 189

<210> 1424
 <211> 213
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F6

<400> 1424

tggctctctg tggcctccgc cgctgtggtc cgtgccgctc cggggcgctt tgtgggggttg 60
 ttcttctctc tggtcgctcg cttttgctcc ttctcggggg tgctcggggc cggcgccgcc 120
 tcgttctctc ctttggtggg cgctctctcc gtgtgcgctt ctttctctgc tgtctctggc 180
 ggtccgttct ctgtgcgggt ctgccctccc gtg 213

<210> 1425
 <211> 274
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D11

<400> 1425

aatatatact ttccggtgtaa gacgagccgc cgcctctagg cggctactgc acagtcagca 60
 gaatgaacct atttctgaaa gccttgggac gacacagggt tgttttgggt cagccacacg 120
 tttcacttgt cgctgtccct actttgatcc cggagtactg atagcttgtg ttctgttcac 180
 gattgattca ggtgtcattc ctttgttttg cgtgtttttt ttctgtctcc ttttaacgct 240
 gagccgatat atatgtactg ggtctctctc gaat 274

<210> 1426
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D4

<400> 1426

cacgcggtca acagaacatc caaccgagct aagtaattag gtcgaaaatg acccgtgccca 60

gcagcagtag cagcagccgg cgtgtgacgc tgggtactgct cggctctccgc ctgctgcttc 120

tggttggtgt tgcgcaggcg gtagtggagt tgggtgcctgc tgatgataat atcgccgccg 180

ccgctgctgg cacggcggtg gacgatggcg agccgcctca gcagtgcgcg accccggtga 240

gcgtggagga cgcgtgccgc ggcgcgtccg agacgcacgc cggcgtggcc taacaccact 300

gcatggcgtc gctgggcgcc gatacgcgca tcaatgaagc cggcaacatt aacaatgcac 360

ggctggcagt tctgggcacc aggatggcca tcgaccatgc cttcagcatc aagtcaaaga 420

ttaaacacct cctccgag 438

<210> 1427

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E3

<400> 1427

ttccgggaag acccacgcgt ccaagggatg ccagacacgc agtgcccat cgcgcccaac 60

accaacttca cgtacaagtg gcagcccaag gaccagatcg gcagcttctt ctacttcccg 120

tccatcggca tgcagcgggc ggcgggcggg tacggcgcca tcagcgtggt gagccgcctc 180

ctcatcccgg tcccccttga ccagccgccg ccggagagcg accacgcggt gctcatcggc 240

gactggtaca ccaaggacca cgaggtgctg gcgcgccagc tcgacgccgg caagagcgtg 300

ggccgccccg cgggcgtgct catcaacggc aagggacgca acgaccctga agccgccgcg 360

ccca 364

<210> 1428

<211> 308

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B4

<400> 1428

cacgcgtcga tcctccgtga aagccgacgt cgacgtggac gccacaacg aggccgagca 60

atgggatgcgc tcggagccgg ggacctccat gtcgccgtca tcggaagccg gcgacaacac 120
 ggtcatcagt aactcaacg atgtccccgg cgcgcgcctt cgcggggcac acgctcgagg 180
 atgccgcctc ggcggcaggc gccgtccccg cggctctctc tcgttcggat gtcctatagc 240
 gtatgaaggt cgctcccgt gctggaccct cgggtgctggc ggtcgatgaa gcaggccgcg 300
 gcgtgccg 308

<210> 1429
 <211> 314
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C2

<400> 1429
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 gtatattcac attaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaaag 120
 ataaaaaaaa agataaggga ggcagctcaa acagataaaa tactagattg agcgaaaatg 180
 caacttaaat ggcgctcccc tctaggcagc tactgtcaag tccagtcgcc gtcgtttaac 240
 ctggtacggc cctgagaatc ccttctgtgt cttcaactga ctctcttctg tagaaacccc 300
 ctttccgctg gccg 314

<210> 1430
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C3

<400> 1430
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 gggggcacta aatacctacc acattgcact cagactacat atactgtgtt tgtgtgttgt 120
 atgccgtatg cgtgtgtgag cttgcgcaaa ttggacatct aggccgtgcg taccctgcga 180
 tgaaaggcgc cgtcatcggc gcatcgaccg tcctggctgt ggcggtggtg gccaccatct 240
 gcgtcgtttc cttcaaaggc agcggcgatg gcgggagggc cgaggagggc gagatgtcca 300
 cgtcggtaaa gtccatcaag tccttctgcc agcccgtgga ctacaggag acgtgcgaga 360

aggcgctgga ggcggccgcc gggaacgcca ccagccccac ggagc

405

<210> 1431

<211> 310

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C4

<400> 1431

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gccagtcgat cgttcaagaa cattaccagc ttaccaacat cagcagcatc agtctcacc 120

gttcgatgac atgggtccgcc tggcgccgg cgccgtgttg gcgctcctag tggcggtcgc 180

tgcggtggcc gcgttcctcg cgggtgccggc ctcggtgcgac gtccggggag ctgaacgcga 240

tggggttgct ggctgagaag ggcggcagca tggcggggcc gcagaagtgc tcgggctctg 300

tgggcgagtg 310

<210> 1432

<211> 307

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A10

<400> 1432

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atttccgtgg atcatggccg ggttggcatg cctcttgact gctctgggtg gctttgggga 120

tcatccttgc gtagcgcgat ctccagacgc gtcgattcgt cggtcgtcct acgacttggc 180

gcggggattc ttaggacgat cgtgggtagc agatttgtga ccccatctg gcactatgag 240

ctaactctct gcgttacaga tgccagcgta tcgctcgagc tgggtgtgtc cgacatcaga 300

cacgttc 307

<210> 1433

<211> 420

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-A2

<400> 1433

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gcagcaggcg ggccgcgcgc gccgccgcac caccgggtag cccaggccgc gcgcgcgcgc 120
cgtccagctc gtctgtgtgc gctcctccgt gatggccgac gtcgacgtgg acgccaacaa 180
cgaggccgag caaaggacgc gctcggagcc ggggacctcc atgtcgccgt catcggaggc 240
cgacgacgac acggccagca gtacacccaa cgagtccccg gcgcgcgcct tcgcggggca 300
cacgctcgag gagecgcctc ggcggcgggc gccgtcncgg cggtcncgtc ncgttcggat 360
gctccagagc gtgtgccggt cgctcccgct gctgaacctg ccgtgcgggc ggccgatgat 420

<210> 1434

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A4

<400> 1434

attccccgggc cacacccacg cggtcgaaca ggcatacaag cacacatacc tcgcgagcaa 60
caatgggatc cagggtcatcc attctacatg caaccacgaa gctggatgca ctgtctgcgg 120
atgtgttgtg aactagacgg ctcataattcg acgttggaac cggatggaag catgtacacg 180
tgcatgacag acaaaccgca gctgccatgg gccatcatcc gcatcagtgt acatgatcgt 240
gtacctgtag ctgcttgctg acagtggccg tcgcccgcgc agtgaacctg gtgcgcgcca 300
tcggggactt ctctctctca cgcaccatgg gcccattgtt cgccatcatc ggcgtcatcg 360
tcgcccccat cctcgtgatg atcccgatga tcatttaccg gaagcgggac cccgtgaaac 420
ctcgcgctcc t 431

<210> 1435

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A5

<400> 1435

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 gtcaagggtgg acgccagcgc cgtcgaggcg gtggcgctgc cggatgaagcc cgccttgacg 120
 ctggaggaga cgggggagct tgagaaggag gtgtgggcca ggttctacgg cacgggcttc 180
 tggaggagcg tgtctcagct cgacgacgac gacaggtgac cggaacaatc aggcccgtga 240
 gtgagcgagc gatcgaccag ctctccggc gatgcttaag caatagcatg cgtttccttg 300
 gttgggtttc cttcgttggt tttctgcgga aataagagaa gatcgaggaa aaggaaatgt 360
 gatgcatggt cgtcgatcga ctatacaggt ttcttttggt ttgcctttt 409

<210> 1436
 <211> 214
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A7

<400> 1436

acgcgtccac tctacctgaa ctacacaaca atgttggtgc tgctgctggt gtacaagatc 60
 tttttttgtg ctgcgttggt atgataatat gcatggcaag ctccaaaatg tggtttccaa 120
 tttatgtata gcaaggggtt acaaaagttg gtaatcataa tgcttggtgcc ctgtagtatc 180
 atactattac cagccaact taatttcttg tttt 214

<210> 1437
 <211> 250
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G11

<400> 1437

cacgcgtcta actctcttcc ctctatcggg tttcgtcacg tgtgttctct cgttgtctaa 60
 tgccgccatc tacacttctc tacttaatca tcgacatggc tgtctcgagg cagagaccg 120
 gtgtacagca tggggagctc gatgaccatc gtggcgctct cctgctccg ccgctccctc 180
 ctctcctggt ctttcgaggc gaccgccgat gcttgcgttt tccttttagct gtttggcgag 240
 gaccaattct 250

<210> 1438

<211> 139
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-G8

 <400> 1438

 gcacacgatg tgttccccctg ctaatgctcg gtctcagtat gctggttctg ggtgctatgg 60
 cacacgtcgt attgaaattg ttgagtgcgt atgattattt ctctgcgtcc attgcaggca 120
 cggcatttag caatcgtga 139

<210> 1439
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-H4

 <400> 1439

 attaccgggc cgaccatgcg tctgtcgtcc tacgacttgg caagaagaaa cttaagacga 60
 gcgtaagaa gagatctgtg aaccccatct ggcacgagga gctaactctg accgtcacag 120
 atcccagcct agctctgaag ctggaggtgt tcgacaagga cacgttcagc agggacgacc 180
 cgatggggga cgcggagatc gacgtggcgc cgctggtgga ggcggcgaac gcgagcccgg 240
 aggcgagcct gaggaacggc gccatcatcc tgtcgggtgc gccgagcgcc acgaactgcc 300
 tcgccgacga gagccacgtg tgctggagga acggcaagtt cgcgcaggac atgacctcc 360
 ggctcaagaa cgtggagagc ggggagattc agctgcagct gc 402

<210> 1440
 <211> 136
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-F12

 <400> 1440

 tcccgggatc agcttgccgc atgaatgtaa tcgttcagat cttaaccgaa attgcattcg 60
 tgtcagagac gactctaccc aatatggatc aggaagaaat gtatcagtga tcgcatcgat 120
 aaacacagtt tgtctg 136

<210> 1441
 <211> 347
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-C10

 <400> 1441

 acgcgtgcc ctgctgtaac tcaacctgcc ttcataccac catcaccagt atagtgtccc 60
 gcccttttct gacattcgca gcgtggacag gcgttgctgc gcgaacggct cctgtcgggg 120
 gagtagcttc ggcgtcagcg gatcagtcg cttctgtgcc cctgctggga gcggctctct 180
 caccgacctc ggcggctacg tcatccacga gccgcgtcta ctgcgacaga ctgcggcgcc 240
 ggggtgtcgga tcacctgtca ccggaatata ttctgtcccc ggcggtgagg cttacgtgca 300
 tgcacttcgg ctteggctcg atcgaccact ctatcgtcgg ggtgccc 347

<210> 1442
 <211> 445
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-014-Q1-E1-H9

 <400> 1442

 cgggtggctc cagcggtccg caaagacctc ctgcctcct ccattgacca acaattaagc 60
 ctccccgacc gccacatcta ttaggtgcag ccatgggtgc ctgtgcaacg aagcctaaga 120
 cgcttgaggg gaaagcccca gctgaggcca ccatctccac acccaagggt gcacctgaga 180
 ccactaccat ccacattgag gttgcggcaa aacatgcagt agttgagaag gtggaggagg 240
 acaaggagga ggcactaaca gtggcggcga aacaagagcc agcagccacc attgagcctc 300
 agcagattgc tagtgaggtg accacttcgg aagtggcggc cgtcgttgtc gagcctgaga 360
 acaaagagga ggaggaagtt gtggagaaga ccgtcatcga gaaggagaag ccatcagcag 420
 tccatgcaga ggaaaatatt gccac 445

<210> 1443
 <211> 342
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-B1

<400> 1443

gcggccgaac ctgatggaca tcagctcttc atgggacatc cgtgcaaccc cgacattctt 60
cttcctcaag aacgggcagc agatcgacaa gctcgtgggc gcgaacaaac ctgagctcga 120
gaagaaagtg ctagcagccg ctgatgccag tacgtcctag tgacacaagt ggaagtgggc 180
aaacgatctg tgatggcttc ccggtgtata gtttccatgg ttcatttgtg tgcttgtccc 240
atgtttgcct ggggacgatg acgttttaca attttggccc ccatcgcgcg cactcgtctg 300
tttctctcat ggaagccgtg tgaacctgtg cgtgtgtgtg ac 342

<210> 1444

<211> 200

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G12

<400> 1444

caatgggcga accgaaaaat gcacctgttt catcatcatc tggttctgac caagagaatg 60
gttcgcctgt ctcggtgtta tctgcaatgc aatcgatgc ttttggttca tcaatatcaa 120
acccatcaac tgggggcacg tctcctgcgt catcagatga tgggaataat gtccttgaga 180
tagtgaatgg ggatgaaaat 200

<210> 1445

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G2

<400> 1445

gccgaccac ccgtctaacc aagcgtcctg acaaacgtcg tacgagaacc tttctcctc 60
ctccaccttt ctctttttct tgccacggca aaacaccttc gccggcgaga gcatggcgat 120
ggcgtaccgt gtcttgaggg tcacctggt gtcggcaaata gacctcaaga aagtgtcgct 180
cttctcccg actcgcatct acgccgtggc ttccatctcc ggattcgacc tccgcatccc 240
ttcccacagc acccaagcag accacagcaa cggctgcaac ccctgctgga acgccgtggt 300

acacttcccc atccccgctg ccgctgacac ccgcggcctc gcactccacg tgaggctccg 360
cgcccagcgt ctatacctgg gcgatcgca catcggcgag gtgttttgtg cc 412

<210> 1446
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G4

<400> 1446

gacgcgtggg cggacgcgtg ggcgcgagcg gccccctttt tttttttttt taaacaagat 60
gaaaaccccg atgaattata taattataaa ggctagtttg acaacttcac tttctcaagt 120
gaatcctatt ttttcaagag aaaatgaatt aaattccctt gaaaaaataa aacctcttag 180
aaaaaataag gttgtgaaac tagccctatt aataaattta tgcagaatgc aacatcgggt 240
tccaccattt tctcttttac agaatactac tgctccgtgt atacggagaa actacatttc 300
acggagtagt aaataaacag ggattaatta gcgccgtgtg catgcatgca tacggcggtg 360
ggctggccga catgatcata acaattaatt a 391

<210> 1447
<211> 101
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-H10

<400> 1447

attatggtgt gtacattttt ttagtcgata ttcttgttct tgtttgtgtt gtagaaatgg 60
ttggatatgc taattttcaa tagccttgag ggttcgtggt a 101

<210> 1448
<211> 386
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-014-Q1-E1-H12

<400> 1448

ggccgtcttc tcgtctcgt cccctctttg cgccgcccc agatccggca ccgcccgtg 60

ctcgaacccg caccccacgc ccgcaggccg ggaccggtgg gcgcgcgccg ggcagtanga 120
 gggagaggaa gggcggcatg gcggcgccgc cggcgaaggc ccggggccgac tacgactacc 180
 ttatcaagct tcttctcatt ggggatagcg gtgttggcaa gagttgcctc ctgttgcggt 240
 tctctgatgg ttccttcaact acaagcttta ttaccacaat tggattgac tttaagatac 300
 ggacaataga attggatggg aagcgtataa agctacagat ttgggataca gcggggccaag 360
 aacgcttccg tactattacc actgcg 386

<210> 1449

<211> 290

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-H2

<400> 1449

cgcgtcggag gcaaccatgc gctgtccct cctcctcgtc gtcgtggccg ccctctcggc 60
 gcgcaccgcg gcgcagctgc cgctggcggg cggcggcggc ggcgccctga agccggactt 120
 ctatagccag tcgtgcccgc gcgcggagcg gatcattgcg gaggtgatgc agacgaagca 180
 gatggcgaac ccgacgactg ccgcgggcct gtcctcgctc ttcttccagg actgcttcgt 240
 cagcgggtgc gacgcgtcgg tgctgatcgc gtccaccag ttccaaaagt 290

<210> 1450

<211> 381

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-014-Q1-E1-H3

<400> 1450

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 gcccaacaaa ccccaaaacc cttaaggggc aggccccacc taaggccgcc gtctcaacac 120
 ccaaggttgc gcccgaggcc actccaatct ccgttgaggt tgcggctgat gaacaggtac 180
 ctgaaaaggt ggtggtggag gagccggctg cggcggccga cggttgagcat cagaaggcta 240
 atgaggtgct cgctccagag gcggccgctc ccgagcccga ccacaaggag gaggaagccg 300

tggagaagac cgctcgtcgan gaggagaagc cagcggcagc agcccatgca gaggaaaagg 360
tcgccaccgc cgccgagacc a 381

<210> 1451
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-H4

<400> 1451

ttataccaat ccctggccga aaaacggaag gccaatcctt gggaacccaa ggtccaggtt 60
cataaccgac aacttcttcg acccaaacia gctcctgcat tccgtggacc tgtcgacgga 120
gcacaagatc gtggacctca aggaccgat caaggcctcc gtcgtcatct ggcaccggaa 180
gatcagcaac aagctctcgt ggggccccgc cggcgtcagc ctggagaagc gggaggagtt 240
cgaggagcgg gcgcagaccg ccctgctcat cctcaagcac aggttccccg gcacccctca 300
gtcggcgctc gacatcagca agatccagta caacacggac gtcgggtacg ccaccttgga 360
gagctactcc aggaccctcg agagc 385

<210> 1452
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G10

<400> 1452

cacgcgtccg ccaacgcgtc atggctgtga atgtgagcac catgtggacg ttgatgcagg 60
cacaagttgc gatggttgtg gcgttgctct tcttggtgag cgggtgcatg tgcggtcctc 120
ccaaggtcac ccctggcaag agcatcactg ccacctatgg caaggactgg ttagacgcta 180
aagcaacatg gtatggcaag ccgacgggtg ccggtcccga cgacaatggt ggcggtgcg 240
ggtacaagga cgtgaacaag ccccccttca atatcatggg cgcgtgcggc aacatcccca 300
tcttcaaaga tggctctgggt tgtgggtcct gcttcgagat taagtgcgat aagcctgtgg 360
agtgtcccg caagcccgtg gtggtgcaca tcacagacat gaactatgag cctat 415

<210> 1453

<211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-014-Q1-E1-F10

 <400> 1453

 tccggcaaaa catcagcggc atgggagcac tgctcctcct cgtcgccttc gtcgtcctcc 60
 cctccgccgc cctgtcctcc tcgtcctcgc ttctgcactc acctcctgag agtgatgaga 120
 caagcggcgg cagcgagcag caagccacgc cggaagacga gaacaaggag aacgagcggc 180
 agctggcgac ggagaatgcg tacgcggagg ataacgtcgt ctaccaggag atgctcaatt 240
 acgccaatga gaaaggtctg gtgtccccga acaaaggcac ggggtggtac aggggcatcc 300
 cccgggagtt cgtggacgcc cacaacgagc tccgcgcgcg ctacggcgta ccgcccatga 360
 agtgggacaa ccagctggct cg 382

<210> 1454
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-014-Q1-E1-F11

 <400> 1454

 cggtcggcat cncgggtggc cccacgcgtc cgctcaaaga caaccagagt gcagcggaga 60
 cgggggcacc cgccccggc tggccgacct ggcccgtgta cgtgtcggcc gaggtgggca 120
 tgaccgtggc cgcgttcgcg caccacgagc tcaacgccat caaggacgac gacgtcctgt 180
 acaagtgcac cgacacctgc tccgaggaca tcgaggaagc cgtggcgcac ctcagcgccc 240
 tctcccgcga cttctccgac gccaggttcc tcgaggtcaa gtcttggtc acctccacgc 300
 tcggcggcac cgccacctgc gaggacgcct gcaaggacgc ccccgtcagc gacatcaaga 360
 acgtctgcat aaccaagagc ttcgagtttg agaagctgct gcgcgtcacg ctggacctca 420
 tcaccgaggc ttccggctcc atgtcggccg 450

<210> 1455
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-F12

<400> 1455

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tcacctctcc ttctctctct ccttgctgc cagggagagg ggaagtcaga ggcacggagt 120
ggcgagagc agacgcacgt gaaccattgt agctgtccct gtcgtcgtcg tcgtcgtcaa 180
cgaatccaca caaggaaagg atggagaaga agccgaccat cctcatgaac aggtacgagc 240
tcgggcgcac gctcgggcag ggcaccttcg ccaaggtgta ccacggccgg aacctcgcgt 300
ccggcgagag cgtggccatc aaggtcatcg acaaggagaa ggtgatgcgc gtcggcatga 360
ttcgacagat caagcgcgag atctccgtca tgcgc 395

<210> 1456

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-F2

<400> 1456

ccctccctcc ctacacaaa taataaggaa agggcccgcc ctttctctcc gacatccaca 60
aggggggagg ggaaaacacg tacattcacc cggcggcaat aatggcctcg gttccggctc 120
cggcgacgac gaccgcccgc gtcactctat gcctatgcgt cgtcctctcc tgtgccgcgg 180
ctgacgaccc gaacctcccc gactacgtca tccacggccg cgtgtactgc gacacctgcc 240
gcgccggggt cgtgaccaac gtcaccgagt acatcgcggg cgccaagggtg aggctggaat 300
tcaaagcact tcggcaccgg caagctcgag cgcgccatcg acgggggtcac tgacgcgacc 360
ggcacctaca cga 373

<210> 1457

<211> 434

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-014-Q1-E1-F3

<400> 1457

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 ggacgaaacc gagaagggtga aagggttcac gtcagaatcc actgtgagct acagagatcg 120
 gctgaagatc atggccggcc tgggtcaacc ggacgacctc cagctgggct ctacggagag 180
 gaagctcgtc caggcgtaca acgagaagcc agtcctctcg cggccccagc acagcttcta 240
 cgaggggagag gactaccttg aggtggacct tgacatccac cggttcagct acattgctan 300
 gaaggggctg gactcgttca gggcacgcct caagaacggc atcctcgatc tgggggttaac 360
 gatccaggcc cagaagcagt cggagctccc tgagcaggtc ctctgctgcg tcagggtgaa 420
 caagatcgat ttca 434

<210> 1458
 <211> 376
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-014-Q1-E1-F4
 <400> 1458

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 gggacaggaa atcacccggcc atggcctcaa ttccggcgac aaccttcgcc gtcaccttat 120
 ccgtcctctt ctgtgccgcy gctggaaccg ccgtcgacaa cgacctcccc gactacgtca 180
 tccagggccg cgtctattgc gacacctgcc gcgccgggtt cgtgaccaat gtcaccgagt 240
 acatcgcggg cgccaagggtg aggtctggagt gcaagcactt cggcaccggc aagctcgagc 300
 gtcctatcga cggggtgacc gacgggaacg gcacgtacac gatcgagctc aaggacagcc 360
 acgaagaaga catctg 376

<210> 1459
 <211> 449
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-014-Q1-E1-F5
 <400> 1459

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 gctgctgtcc acggccacgg cgcgggtggc gtcgctggac cgccgcctgg gcctcagcga 120

caagttcagc ctcggcacgg ccgcgggccc cggcgcgggc cgcggcgctc acgagcgctt 180
ccaggtcacg gagegcgcct ggggggcctt ctcggcgggc ggggaggtcg tggccggcag 240
cccctacgcy tcccgcggcg ccgcctgggt gtcggcgggc gtcggcgccg tcgcccgggc 300
cgcgtccgac gttcggggca atgacaagga aaaagtgggc aaggcccaag cagaggggga 360
ggcctcggcg gcggagcatg gtcactacgc gtcgtcccg gtcgacgtgc acgacggaca 420
gggacgtgca gctcagcacg gtgaccata 449

<210> 1460

<211> 454

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-F9

<400> 1460

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cgagcggtgg ccacgatgac gactaataag cccctcctcc tcctcgccct ggcgtccgcy 120
ctccttggtg cggcgccggc cgccgcgaac gcgcccggcg gggcgttcag caactgggtg 180
gcgatgaacc agcagagcta cgcgctgtac gcgcagaagt ccgtcgggga cgggggcaag 240
gagcccctgg acaagaagct gtcggaggcg gagaagaaga aggtcacgta cgtggtggac 300
cccagcggca agggcgacta caccaacatc accgcggcgc tggaggatat cccggtgagc 360
aacaccaagc gcgtgatect ggatctcaag cccggcgctc agttccgcga gaagctgttc 420
ctgaacatca gcaagccgtt catcacgttc cggt 454

<210> 1461

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-D3

<400> 1461

tctaaagtga ctcgtggtaa gtacaaggcc ggttacgttt tgcaaggact tgaaggacaa 60
caacctcgtc acgcccttct ccgacaacaa ttacttgcca aggggctgca acttcgaagg 120
aaaactcctc cccgcaagca aaaccccaaa aaggacttgt ccgtaaccag gcaagaacaa 180

tcaaaaccac cccgttgagg tgggtgttgac gccggactcc gacgagagct cgccgaagcc 240
gccgccgcac gcggaccagg actcgcccgg aggctgcgag tcggggcgcc gcagcacggt 300
gccgttcaag gt 312

<210> 1462
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-D4

<400> 1462

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gcggcgcccc tgccgcgctg ggtgggtggcg ctggcgctgg tgctggcgctg cgcgctgctc 120
cagccgcggc cgtccgacgc cgcggcgag cctgccccgc attcgccggc gacggcggtg 180
tcgtcgggcy ccgccaagcc caagtgcgtg gccggcgcca ggaacgacca cgcgctgccg 240
ttcggtccg tgacgacccc ggacagccag gaggaggagg gctccagcgt cacaatcgac 300
gcgccccgcy ccgcgccccg cgacgtcggc cactacgacg gcagcgacta caacgacccc 360
gacgtgcccc acaacgacca gctcgtcgtc gtcggccact gaaa 404

<210> 1463
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-D5

<400> 1463

gtcgcacttc cggcaggcag acgagctcct cgccgattca ggggtggcatt gcagcttctg 60
cttccgctac ataagcgatt tcgcattcaa gatgcaagcg tatagccacg tcgaccggat 120
caggttcaag tacttctga accctgagag gatccaagat gtcattctga gagggcgga 180
ccttttcgat atgcttccag aagagtacac gttccaagag atcatcgcca agctggggcc 240
gatcccgagc acgtattctg gcgttcatct tcctagctat ctgctaagga atgtcgaccg 300
gtttagatac cttctaccgg gcaactgcag gagagaaagt ggctagggtt tatggccac 360
taccctgcaa cctgttgtgc gtgggtgggt ggggtgccagt gccacactgc cccgctgca 419

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<210>      1464
<211>      450
<212>      DNA
<213>      Zea mays

<223>      unsure at all n locations
<223>      Clone ID: LIB148-014-Q1-E1-D6

<400>      1464

cggccgtcga cgcacgccta cgaccctcgt ctcaccctcc ctccctcaca caaataataa   60
ggaaaggtcc cgcccttttc ctccgacatc cacagggggg aggggaaaac acgtgcattc  120
acccggcggc aataatggcc tcggttcggg ctccggcgac gacgaccgcc gccgtaatcc  180
tatgcctatg cgtcgtcctc tcctgtgccc cggctgacga cccaacctc cccgactacg  240
tcatccaggg ccgcgtgtac tgcgacacct gccgcgccgg gttcgtgacc aacgtcaccc  300
agtacatcgc gggcgccaag gtgaggctgg agtgcaggca ctcgggcacc ggcaagctcg  360
agcgcgccat cgacgggggt accgacgcga ccggcaccta cacgatcgag ctcaaggaca  420
gccacgagga ggacatctgc cangtggtgc                               450

<210>      1465
<211>      436
<212>      DNA
<213>      Zea mays

<223>      Clone ID: LIB148-014-Q1-E1-D7

<400>      1465

gcacgccacc gaaatgagtc agcagctagc tagcgatggc tggagcctgg gcactgctca   60
tcgtcctcgc ggctgccgtc gcggtcctgg ccgcgcggcc ggcgtctgca ggcgggggag  120
ccgcggcggt ggcggagate tgcataaaga ctccgtcccc cgacctgtgc accaggacgg  180
cggggaagca cgccaacaag tacaaggtgg tggacgcggt gacggtgcta gagatgcagg  240
tggacgcggt caagaagcgc gtgaaggcgg cgcgagggct cgccaaggag gaggtcaaga  300
cggccgcgac gcccgaggcg cggagggcgc tgaacctctg caagacctac tacctggacg  360
ccgccgacaa cctcggcgcc tgcaagcgcg ccatcggttt ccgcgacgcc gttcacatcc  420
gcgccacgat gagcat                                           436

```

<210> 1466
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-D9

<400> 1466

cacgcgtccg aaactgccat cctctccatc acgaagatgg cggtcatcag caatgtcgca 60
 gtgaaggcgg cgggcgtggc cgcgctgctt gtggtcgcag tgggtgcgcc tgccgcgcgc 120
 gcggcgggcg tggcggtggc gggagggggc cgcgcggttc cggcggggtcc gctggacatc 180
 gcgcagctgg gcgccaaggg cgacggcaag tcggacagca ccccgatgat cctcaaggcg 240
 tggaagaacg cgtgcgaggg gacgggggta cagaagatcg tcatcccgcc gggcaactac 300
 ctgacggggc ggctggagct gaagggcccc tgcaagtcct ccatcatcat ccgtctcgac 360
 ggcaacctgc tcggcaccgg cgacctcagc gcgtacaaaa ggaactggat cgagatcgag 420
 aacgtcgaga acctgt 436

<210> 1467
 <211> 295
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-E10

<400> 1467

cgcgtccgcc cacacgtccg ctctcttctt gatggcgggc gctaccacat attcggcggc 60
 gcggtgggtg cggacccagc ggttgtgggt gctgccccgg cggcctgcag ccccggcggc 120
 tcgcgggccc gagccccggc ctcggtggcg gcacggacgc agaggctccg gcctagcgca 180
 agcgcattgg gcacagccgc acccccgaca gcgcgggggc cagtttactc ggcagcccgt 240
 ccgtgagtgc gcggactcct gggcgcacag gcgcaggtag aacctcaagc gcaca 295

<210> 1468
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-E11

<400> 1468

cggtccgcc acgcgtccgc ccacacgtcc gagcgggttt tctgcatacg acgtcctcaa 60
 acaaccctgg gttaaaggag gacggcaagg gccggacacg ccgctggaca acgcggtcct 120
 cgcccggtg aagcagttca cgcccatgaa ccagttcaag aaggcggcgc tgcgggtcat 180
 cgcggggtgc ctgtcggagg aggagatccg tgggctcaag gagatgttca agagcatgga 240
 ctccgacagc agcggcacca tcaccgtgga cgagctgcgg agaaggctgg ccaacaaggg 300
 caccaagctg agcgaggccg aagtccagca gctcatggaa gctgccgacg ccgacgggaa 360
 cgggacgatc gactacgagg agttcatcac ggcgacgatg cacatgaacc ggatggatcg 420
 cgacgagcac ctctacaccg cgttc 445

<210> 1469
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-014-Q1-E1-E4
 <400> 1469

acgcgtccga aagagccagc cagagaaact aataaaactc tcgccgccgc catccgagcg 60
 aacaagccaa ccgaccccggt cccaaggca atccgccgcc gacgtaccac caccaccgca 120
 ggagcgagat ggagatgaag aggatcctct tcgccgtcct cgtcgtcatc gccgcctcgg 180
 ccaccgcagt gctggcctcc accgaggccg ccgccgcggg cgcaccaact gcctccgagt 240
 cgtccgcga ggctcccgtt ggcgctggcg ctggcgctgc cgctggcgcc gccgccgcgg 300
 ggccctccgc cagcagcggc ggcgccgcc tcgccgccgc gcccgccgcg ctctctttct 360
 ccctcctcgc ctactacctc cactaagcgt gtgcgt 396

<210> 1470
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-014-Q1-E1-D2
 <400> 1470

acaacactct aaagtgagtc gttgtaagga gaagcaatta aaaattcatt cgcaccatgc 60
 aatgctctac cgacctgaat tgaatgctat cggataaccc catgtacttt tgtccttaag 120

ggtataacac cataggtaat gtaacaattg tttgcacatg taacatgatg accgagaaga 180
 gaaacatgca aatggagaag gaattgtttc tgcctttcta ggattcttct tagcacaatg 240
 tgcaaaactt tttcataatg taagagagtt ctggcgtcaa aaaaaaaaaa aaaaaaaaaa 300
 aaatacataa aaataaagtc tgcattaaaa gaatagacgc cacaaacata cagaagatac 360
 tcatggcatt cgaagacaac aaaaaaaaaa aaaggggggg ccccccaaaa 410

<210> 1471
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-B9

<400> 1471

acgcgtccgc aaaaacaagc tcaacaacag ccagctcgcg aaaataatga agagccgcag 60
 catggcatca tcggccgcgc tcttggtgct agccctcgcg ctagtggcgg ccaccgcccc 120
 acaggtagcg gaggcaaaga agaagagagc ggcgagagc ggcgaggcgg cggaggcgaa 180
 gaagatccag gacgacttct gctcgacgct gtgcgagggc aagaagggga cggacctggt 240
 cgtgtgcaag gagtctcgcg cgctctccca gcagtccaac ctggtgctgt acggcaggat 300
 ccagtgaag ggcaagtga ccgagcagaa gggcatcacg gcgccggcca tgaaggtctg 360
 ccaggaggag tgcgacaagg cgtacgtggt ga 392

<210> 1472
 <211> 414
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-014-Q1-E1-C1

<400> 1472

ccttacaagg ccaacttaac aaccaagttg gatggaatcc ggctggcaac aacggaccta 60
 accaattaca aggacaatgg taattggttc aaaattcaac gcgtggataa cctggccatc 120
 accggcaagg gaaaccttga cgggcagggc ccagccgtgt ggagcaagaa ctctgcacc 180
 aagaagtacg actgcaagat ccttccaac tcgctggtga tggacttcgt gaacaacggg 240

gaggtgtccg gggtcacgct gctcaactcc aagttcttcc acatgaacat tttaccggtg 300
 caaggacatg ctgatcaaag acgtgaccgt gacggcgccc ggggacagcc ccaacacgga 360
 tggcatccac atgggcgact catccgggat tcacatcna caacacgtca ttgg 414

<210> 1473

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C10

<400> 1473

ccgggtggcg ccacgcgtcc gccaacacgt ccgcccacgc gtccgcccac gcgtccgctc 60
 gttatcctcc tcttgattg cattgcaggt cgtagttgag cagcagcaac cactgcacag 120
 gatgtcgtgg cagacgtacg tcgatgagca cctcatgtgc gagatcgagg gccaccacct 180
 gagctctgcc gccatagtgc gccacgacgg cgccgtttgg gccagagca ccgcattccc 240
 acagttcaag ccagaggaga tgaccaacat cattaagggc ttcgacgagc ctgggtttct 300
 ggccccgatc gggctcctcc ttggccccac caagtacatg gtcattcaag gcgagcccg 360
 cgctgtcatc cgcggaaga agggatctgg aggcataact gtgaagaaga ccggacaggc 420
 gctggtgatc ggcattctacg 440

<210> 1474

<211> 84

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C12

<400> 1474

cggtccggca tcacgggtgc cccacgcgtc cggttacact tcatggcttc aacgacagca 60
 ggcattcagac gctgtctccc ctgc 84

<210> 1475

<211> 108

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C3

<400> 1475

cgccctccgc tgcggcaaag tcctggggct gccgctgccg cegtcctacg cccccgcgcg 60
ctaagacgac gaaagccttc gtttctcctc gtggtctgac catccaat 108

<210> 1476

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C4

<400> 1476

tccgtgagga ggtggaagga gcaaccctt gggcaggta acacaaagca cctggaaaaa 60
acggcggaac caaagggtcaa ggtgctggac ctgacgatcc tgtcacctgg cagaccggac 120
ctgatccttc cgatcccgtt ccaggctgac gagaagggt atgcgtttgc cctcaaggac 180
ggcagcccct acagcttccg cttctccttc atcgtctcca acaacatcgt gtcaggcctc 240
aagtacacca aactgtctg gaaaactgga gtcaaagtgg agaccagaa gatgatgctg 300
gggacgttca gccccagct tgagccctat gtctacgagg gcgaagaaga gaccaccctc 360
gctggcattt ttgcgac 377

<210> 1477

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C9

<400> 1477

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ccccgtcctc ctcaccgagg cgcctctgaa cccaaggct aacagggaga agatgaccca 120
gatcatgttc gagaccttca acacccccgc tatgtacgtc gccatccagg ccgtgctctc 180
tctgtatgcc agtggccgta ccacaggtat cgtgctcgac tcgggagatg gtgtgagcca 240
caccgtcccc atctacgagg gatacgccct ccccacgcc atccttcgtc ttgacctggc 300
cggtcgcgac ctcaccgact acctgatgaa gatcctgact gagcgcggat actccttcac 360
caccaccgct gagcgggaaa tcgtgaggga catgaaggag aagctcgctt acatcgccct 420

<210> 1478
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-D1

<400> 1478

acctcctcct cgacgaagtt gaacaagccg gccggcggaa cgggaaaccc gcggtgggtg 60
ctaaatggct ccggcaaccg gagggcccct ttggtataat gatctcggta ataaatgcaa 120
ggccttaggt cacggccatt tccttgatcg attattttcg cggaactatt tatgcagctc 180
aaaatttata ctactatata tacctacgga aagcaacaat tcaaaccata tactggagtt 240
tgtttaaggt atcatcgagc agaaatatat tcttggtatt cgtagcatta tatttgatt 300
ttattacacg ttttgataat aatcagtaaa catcccgga ttcgggttca gctcacacat 360
gtaaaacata gaaaacgttt gtgtgca 387

<210> 1479
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-D10

<400> 1479

aagactctag tatgagtcac acataaaactt tataaataaa aaaatagaat agtacaccat 60
aacaacatac aacagctttg cctcgatcga gagcatgcat gaatcacagg cgtcgtcgaa 120
tcaaaagaaa ggaagaaaca aaatgatgtg tggggtgggg gtttggtgca tggccgtcgc 180
tgttaaaatt cgacacacga cagttgcgta aatagaccta gcgtaatcag ctgcacaaac 240
gaatgagaga gcgagcgagg gaagcaaaat ctgggtgaag agatgaatag atgatgaccg 300
gaaccccgcg cggcctggca aactgggcct aagcacctgc tccgattcat ctgctctgct 360
gggc 364

<210> 1480
<211> 436
<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-014-Q1-E1-D11

<400> 1480

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 gtgctaaccg ttggcgccga tgttcccaaa gccgggcaag ccaaaccctt aaagccttgc 120
 cggccccctt gtaaacaaca accacggaaa gttcacggcc gggccgtgga aaccgcacca 180
 cgcaaccttc tacggcnggc gtgacaggtc cggcaccacn gcgggcgcgt gcgggtacaa 240
 ggacacgcgc acgcatgggt acggcgtgca gacggtggcc gtgagcactg tgctgttcgg 300
 tgacggcgcg gcctgcggag ggtgctacga agtgcggtgc gtggacagcc ctacggggtg 360
 caagcccgcg gcggcagcgc tgggtgtgac ggtgaccgac ctgtgcccgc ccaaggatca 420
 gtggtgcaag ccaccg 436

<210> 1481

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-D12

<400> 1481

cacgcgtccg gtacggcgcc cacacgttg gcttctccca ctgcaaggag ttgcgccgacc 60
 gcctctacaa cttccgcagc cagggcgggga agccggagcc gttcgacccc agcatgaacc 120
 cgtcctacgc caggggggctg caggacgtgt gcaaggacta cctcaaggac cccaccatcg 180
 ccgcgttcaa cgacatcatg actcccgga agttcgacaa catgtacttc gtcaacctgg 240
 agcgcggcct cggactgctc agcaccgacg aggagctgtg gacggacccc cgcaccaagc 300
 ccctggtgca gctctacgcg tccaacccca ctgccttctt caccgacttc ggccgcgcca 360
 tggagaagct cagcttggtc ggcgtcaaga ccggcgccga cggcgaggtc aggcggcggtt 420
 gcgac 425

<210> 1482

<211> 448

<212> DNA

<213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-014-Q1-E1-A2

<400> 1482

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aattccgtgg tgagaacgaa gacagagaga aagaaccgag ctgtgccatc gccggtgggc 120
tcgtcgttgt cgctgcccc a gtgccgtgcc gtgaagctcc acctgtccat ggagaagtta 180
ttatggcctc gccgcgttga accggcgccc ggggctcggg aattcttcac cggagaccgc 240
gaacccactg tcttccgtgg ccagcctctc cgctgactcc ttctctgcgt gaggtcacga 300
gtcacctgat gagcaagttt ggtacctgga atctcaagtc ncaagtcaag aacatgtacc 360
agagaatgag gcgcttggag gatgcggtga tgatttcgtg agtgggtctag gccgtcgtct 420
cncagtcaac tttgggttgc tggaccgt 448
  
```

<210> 1483
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-A4

<400> 1483

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cgggggcagc caagccttcg gtatcacccg attacctggg ggcgggtcct ggttcaaaac 60
aacggaacaa ccaagggcaa ggaaacctgg ttttggacca ggaccaattg caacaattct 120
tacaattcaa ggttgttccc aattacctgg atgagggggt tgggtccaac tttcaaattc 180
gcaggaacaa cgcggtatcag cacaaggtcc ttcaacttca aaacatccaa ttggaaaaac 240
gttctgtttg agacagtgac agtcaaagcc tccggcgaca gctccaacac ggacggcatc 300
cacatcggcg actccaacaa cgttacaatc agcagcatca tcatcggcgt cggcgacgac 360
tgcacttgca tcggccccgg gagcaacatg atccgcatcc atggcgtc 408
  
```

<210> 1484
 <211> 419
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-014-Q1-E1-A5

<400> 1484

acgcgtgggg tcgctgaccc tgaaatcaag gaggaggtgg tcgacagctc ccttgaattc 60
ctcatccttg ctagtgatgg actctgggat gttgtcacta atgaggaagc tgttgccatg 120
gtcaagccta ttcaggaccc ccaggaagca gcaaacaagc ttctcgaaga agcgtcccgga 180
aggggaagct ctgataacat caccgttggtc atcgtccgct tcctatatgg aactaccggt 240
gataaatcag gcgcagacaa agagaccacc aatgaccaa actcctaatt acctcctggt 300
aggattcctc atgcgtgtgt tttcttctgg ctgttgatc tgatgctcaa agtanatgct 360
ccgtgtgtct tccgtgtgtg ttccggcaag aaactgaatc ccccgaccgt cgctgtgat 419

<210> 1485

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-A6

<400> 1485

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gatgtgctcg agagctccct taaattcgtc atcattggta ctgatggagt ctgagatggt 120
gtcactaatt aggagtctgt ttgcacggtc aaccctattc atgagccgca ggatgtatta 180
ctgaagcttc tcaaagaagc gtcaccattg ggagcctctg aacagatcac cgttgtacat 240
cgtcggcgctc ctatatcgag ctacgggtca gtactgaagc tgaaattctg agacgaccag 300
tgatcagtgc tccaaagtag ttgcagctcg gattgctcat gcatctgtgt tctt 354

<210> 1486

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-A8

<400> 1486

attcggccgt cgacccacgc gaccgaggac gcgtgggata gcatgcgccg tccttttata 60
ttctattcca gcatggccag ttcattaccg gcaagggaaa ccttgacggg caaggcccag 120
ctgtgtggac caggagggcc tgcaccatta actacgactg catgatcctt cccaactcgc 180

tggatgatgga cttcgtgaac aacggggaag tgtccgggggt cacgctgctc aactccaagt 240
 tcttccacat gaacatgtac cgggtgcaagg acatgctgat caacgacgtg accgtgacag 300
 cgcccgggga cagccccaac acggatggca tccacatggt cgactcatcc gggatcacca 360
 tcaccaaacac cgtcattggc gtcagcgacc actgcatctc catcggcccc cggac 415

<210> 1487
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-B11

<400> 1487

taccggtcgc actctcgggt ggccccacgc gtccgccaca cctcgctcat gtccgctcaa 60
 cggggcgggc tcaacaaccc ttctgaaaaa ttaaaacttc tccttgaggc ctgagcccct 120
 cgccgcggtg agccaagccg ggcgacgtcg ccccggggct cacgctcacc acgagcccaa 180
 ccaattaata atatatatat atagctagga tcgacgtca gtaacatggc aggctccgcc 240
 gtcctgaaga gccccctgtc agtcctcgtc tacatcctcg ccgccgtgcc cgccaacgcc 300
 gcggcgacgc cgaccgacgc cgccatcgac gaggcgtacg cgcattctcgt caacctcacc 360
 gctaaccagg agtactgggc ggagcgcgcg gaggcggcgc acgcgtacaa ccgcgcggcg 420
 taccagaccg accccgtggg cgtcgtgcag cgc 453

<210> 1488
 <211> 412
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-014-Q1-E1-B4

<400> 1488

gccggaaatg gaccogaatt ctgcatccta cagttccggg gccctccttc tcttcgccgc 60
 catcattgcg gaggtcgtca tccccgcacg cgccatcgga gacaagtgcg ccgcctgcaa 120
 ggccgttgct gcggagctgg agattggaat ttcgagtgcg aagccgagaa atcacttgga 180
 cttgcgcaac cgcttaaatt ctaaaggcca gagggagggg aaggatcatcg attatagggt 240

cagtgagctt cgggttgtgg aacttctgga tggcctatgc gataagatgc aagattatac 300
 cttaaagaag ttggaatcag gcgaaaaggg atgggttaaa gtaacagact ggaatagctt 360
 tcaaactgaa aataaggcag cagcaagagc gcactccana aaactgtcca cc 412

<210> 1489
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-B5

<400> 1489

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 aacgatgcaa acaacagtag cagcaacacg gcgtgtgacg ctggtaactg ctcggtctcc 120
 gcatgctggg ttctggttgg tgttgctcaa gcggtatttg gagttggtgc ctgctgatga 180
 aaaatatccc ggctgccgcg gatggcacgg ccgtggacga tggtaaccg cctcagcatt 240
 gggcaacccc ggtgagcttg catgaggctt gccgcggcgc atccgagatg cacaccagc 300
 gtggcctacg acaactgcat ggcgtcgtg ggcgccgacc cgcacatcac ggaggccggc 360
 agcaataaca tgcacgggct ggcggtgctg gccaccagga tgg 403

<210> 1490
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-014-Q1-E1-B7

<400> 1490

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 ccatctgcaa gagccacgga acaccaccag atgagaagat tgccatcacc aaagctatta 120
 taggggtatc gaatggatcc aagccccac tctttgctgg catcatagca cttgtgatga 180
 gcatcgcaac gatggtccgt ctgaccgca gcatgatgcc tgggaagggt ctcggtgctg 240
 ccataggtgg agctaccctc tcagaaggta aatcaaaagt acaagagcgc cagcgggtcca 300
 agctatcaga agaggctgtg gaggaagctg aagacgccgt ctctgcaaag cgctctcgg 360
 agcttgagga gaaggtcatt gcactcctga caaaacccgc atcaatgcct gctgataagg 420

angaggttct gc

432

<210> 1491

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-A10

<400> 1491

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cgacgagctt ccaccggtgg ccaagacctc tgccacgccc gaaccgtacg catctctgaa 120
cgtcgccggc ggccgggcagc ccaacgagcc ggccggcgagg aggccgccga agctgtcgat 180
ggagacgttc tcgggggatga tcaagaggcc gttcgccaaag ttcttgagcc cggatgatcaa 240
gggcgtgtgc gccaaagacgg agtaccggga ggactgcgag tcgtcgatcg ggggcctccc 300
ggggggccgag tcggcgggcgg ccacggacag cgtgggcgtg ctgaagctgg ccatggaggc 360
ggtgcggcag aaggccatcg aggcgatgaa cgcggccacg gacaggatga acgcgccggg 420
cacggacccg acgacc 436

<210> 1492

<211> 340

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-H1

<400> 1492

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ttggtgctgc accggccgcc gcgaacgcgc ccggcagtgc gttcaggagg ggggtggcga 120
tgaatcatca gagctaggcg ctgtacgcgc acaagtccct cggggacggg ggcaaggagc 180
ccctggacaa gaagctgtcg gacgcggaga ataagaaggt cacgtacgtt gtggacccca 240
gcggcaatgg cgactacacc aagatcacgc ccgggctgga ggatatcccg gtgaccaaca 300
ccaagcccct gattctggat gtcaagccct gcgctcagtt 340

<210> 1493

<211> 313

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-013-Q1-E1-H10
 <400> 1493
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 taaccatcga gagggcggtc gagagaaacg agagcggcag acaccatggg gagctcgagg 120
 accatcggtg cgteccccct gctectcttc gccctctctc tcttggttt cgcgccacc 180
 gccgaggccc gcgttgctcc cgagctgttt ggcgaggacc aattccagcg gacatgcaac 240
 caggtgcact tcaggaagat gtgccagagc ttgacgaggc tcccgagggt gaccacgccg 300
 cgcgaaactgc tgc 313

<210> 1494
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-013-Q1-E1-H12
 <400> 1494
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 cccttgagga caggaaccac ctcaactgaa ccgagtgcgg ctttcaccaa cacgatacat 180
 agctcggcac tagtgccatc tcatgttagc aagtgtgcat gtgcccacac cctaagggtca 240
 gaatttatat aagcatgcta tgtgtgggct agtgatggta atttagtctc ttcataaaga 300
 ttgaatgctg taccgggagc gtacgtacat attactacc agcctgctgt tcattgtttg 360
 atatcacctg ggattcacga gactgctggc actgat 396

<210> 1495
 <211> 458
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-013-Q1-E1-H2
 <400> 1495
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acggcgggccg ccccaatcgg ggacccgcag caacaacggg gcgttcccgg gggaaagcga 120
acgcgacggc gtccccgtga tgggggtccac cgatatccgg atcgagcacc tgtccatgag 180
cagctgcgcg gacgggctgg tggacgcggg ggacggctcc accgccatca ccgtctccaa 240
cggccacttc acgaggcacg accacgttat gctgttcggg gccagcgacg ccgcgtccaa 300
ggacagggag atgcaggtca ccgtcgctt caaccacttc ggcaaggggc tggcgcagcg 360
gatgccgcgc tgcgcgcag gcttcttcca cgtggtgaac aacgactaca cgcactggct 420
catgtacgcc atcggcggca gccggaaccc caccatca 458

<210> 1496
<211> 413
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-013-Q1-E1-H4
<400> 1496

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ggacgcctcc ttccggcgcc gcttcgcgcg ggccggcctc gtcaaggcct ccgtcccgtc 120
ggacggcggc gcgaccacgg tgcactgctg gcgcttcccg ccgagcgccg acgacggcgg 180
cggcgaggac gcccgcgccg tccgtgtgct cctgcacggc tttgggcccc cggcgacgtg 240
gcagtggcgg cgccaggtgg gcccgccttc gcgccggttc cggctcatcg tcccggacct 300
gctcttcttc ggccgctcgt ccacgtcgtc ggccgccggc gtctccgagg cccancaggc 360
ggaggcngtg gcgaaggctg tggccgctgt ggccgccggc ccggcgcgcg tgt 413

<210> 1497
<211> 434
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-013-Q1-E1-H6
<400> 1497

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gggaacgact ctgtccgcta tgaagacagg acagtgggag ggaaagagga agtcgttgag 120

gcgatcaagg caacagggcg gtgcaacctg ttctctgctg gacagggcac gccctgcatg 180
 ccgctggttg actggagcac ggacagcccc gagctcgggc cggtggttac ttacctggcg 240
 ctgccggaat tctcgacggt ggcattctgtg ctggatcatga aacagtacga tccgatggcg 300
 aagcacgacg acttcgtcga ggaggtggcc gacatagcgg tggacgttga cacgccgggc 360
 cccagtaacc ggggaaacaa tactagcttc catgccggat gatactgct ggtgttagat 420
 gtattattaa catg 434

<210> 1498

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-H8

<400> 1498

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 gccatggcga actcgtcgtc cggcctggcg gtgagcgacg agtgcaaggt gaagttccgg 120
 gatctgaagg cgcggcggag cttccggttc atcgtgttca ggatcgacga caaggacatg 180
 gagatcaagg tggaccgcct cggcgagccg aaccagggct acggcgactt caccgacagc 240
 ctccccgccg acgagtgccg ctacgccatc tacgacctcg acttcaccac cgtcgagaac 300
 tgccagaaga gcaagatctt cttcttctcc tgggtcccctg atactgcacg caccgagagc 360
 aagatgctgt acgccagctc caaggacagg ttcangangg agctggacgg catccagtgc 420
 gagatccagg ccaccgaccc caa 443

<210> 1499

<211> 361

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-H9

<400> 1499

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 ccacgtttct cctcgtctgtg cttcatcgtg atgggtgtgt gaggtgaggt cgtctacccc 120

cttccctcgt ctatctcgct ctcgctccgc cccgccgtag ttagctgctg cgcgctcgcc 180
 accatggcca gtgccggctc cctgcaacgc agaccgctg ggggctgggc gcatgtgtgt 240
 tcttgctcct agccgccgat gcccgtccg gcgagcagca gccccaccgc gcgtcncctgg 300
 cgccactggc cgtggtagca gccatggcat tgctctgcgc gcccttgac ctggccaaaa 360
 a 361

<210> 1500
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-F2

<400> 1500

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 tgagtcagt ctggaaagtc aaactgttgg aggaaacctc aacgggggtgc ttcaacaaac 120
 gcgaaagtgt cgctgtcatt tagcgcgtcc tgaatggatt tgacctgatg ggctgatgg 180
 ctgttgcct tgatttgagc tcgaaggatg atgaaatggg gggctcaaca tcagcactcc 240
 cgcggtattcc tactacgacg taccgtcata ttgactgac ggtgtacca agagcaagtt 300
 caagatcaag gctggcaaga cattaactgc tcggaaatgg taggctgcat ttagtcgcaa 360
 tggctgtctt gatattgcct cagtcct 387

<210> 1501
 <211> 367
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-F6

<400> 1501

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 ggcaagccga ccgccgacgt accaccgcgc caaccgaga gaaagagggg gaggatcatg 120
 acgatcctca actccgcgt cctcgtagtc gccgtctcgg tcatcgcagt gctggacccc 180
 aacgatgctg ccgtcgccgg tgaccaagac gactccgact catccgtatc agcaggatcc 240
 cgtcacaggt gcaccgaggg gtctgcccga agaacaggtt caggatcagg gctggcagca 300

cactatgtcc tccaaactct cacgctggat ttagtcgcga tcgtcgtctt gctattggct 360
cagttcc 367

<210> 1502
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-G10

<400> 1502

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tgtgctgtgc ccttcttgtg ctgctcatcg tcgcctccag cgcaacggtg tcgactgctc 120
atgacgagag ctgctggaag gacgacgacc accaccctat ctgctttccc gaagactgcg 180
tggcgacctg ccaggatcac ggccacgcgg acggccgctg caactgggca tggctcgtgga 240
ggccgtattg ccagtgcctg ttggcggact gccaataggc gcgaacagct gcgtcgcgatg 300
gcgtcctggc tgccctgccg gccgatgaag gatgaacggt tgcggccgat gatcgatgtg 360
tccgtcggca tgtcgatcac tca 383

<210> 1503
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-G12

<400> 1503

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ctggagcaga tcgctgagac agagcgcttc atggtgaaga aacaggacgg gctggtgaag 120
ctgcaggggt ccaagcaagg gaggaagggg cagctcgcga tcgacgccga gatcttcgag 180
gtgacaccgg cctttcacgt cgtcagagtg aagaagtcgg caggcgacac gctggagtat 240
gagatgttct gcagcaaggg cctaagacct tcaactcagc acatctgctg gagcagccga 300
tctgaggaga acatggctcc ttcagtgggt cagccatcac aattggagcc atcctcttag 360
accgtctccg acagtttact caccctctt a 391

<210> 1504

<211> 447
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-G3

 <400> 1504

 ggggtccacgc acgcgtccga ccacatcagt gcttgcgatc gcgtcggcca cgatctcttg 60
 cgaaaaagct taccctgtgt ctgtctgtcc gaccgtcagt ccgtctaaca atcgatttcc 120
 atgacgacgt ccccgcgctg gtggctgctc gccatggcac tggcgctcgc ctgctgtctg 180
 ctctgagagt ccgccgacgc tgctgccgag gcgtccccga ctccaggcgg ctccacctac 240
 ggggtgcaacc cggccacgga caagtcgtgc aagccccagg gcgtgggggt ggtgctgccg 300
 ggcggcgcca tcgacctga cggcgacggt gacgaggacg agctgccgca attccagccc 360
 cacctcatga tcctcggcca tggccactga tgagtgtaaa tggttggttg gttggctcgtc 420
 ctcagccgat ctactgtacg acacgat 447

<210> 1505
 <211> 357
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-G4

 <400> 1505

 cgtccgacca tattatagtg ctagaatggc ttgttaccta gaggccgttg atctaggtgt 60
 ttggaaagtc actcgtgacg ggatgaaacc tctcaagaat cccgaaaaac ccacacgagt 120
 gaggaaaaag aaattcattt aaatgctaga gccaaaaatt gcttgtatga atctctcagc 180
 atggatattt ttaatcaagt atttaccttg agaactgcta atgaagaagc taatttattt 240
 aattaataaa gatgaataaa acgaagatac aaccagttgc acttcaggaa gatgtgccat 300
 aacttgacaa gggtcccgaa ggtgaccaca caaaaaaaaaa ggggggggccg cctcaaa 357

<210> 1506
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-F12

<400> 1506

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tccggcaaca agatcagcgt ggccttgctg agcgtggccc tagtgggcct gtcctctgc 120

cacctcgcca ccaccgctc cggccaccag aaagacatcc acgtcctcgg cagcgtcgac 180

ggctccagcg acggcagcag ccccgagtcc gaaggccgcg tcgtctacgc ggacatgaag 240

ctggctgata cggaatccga tgcgcggcg cgggcgccc cgcggggcc gtcgtccggt 300

tgaactgaga agcgtgcgtc cagccaagca aggtgggtcaa aaccgagaac taattaaggg 360

ctcgatcgtg tgtcaggcta ctactgttct tgccataatt atatatagat ac 412

<210> 1507

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-D9

<400> 1507

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ttcctccctg gcatggagga agtagctgtt tcgcctatga tcgttgccgc cgtagtgctg 120

gacaacaatg gcgctgacgc ggtctcctgc actgccatcc ctagcgtaac aataagccta 180

gaggagaaag aaaatatcaa tggggatgtt cccacgatca cctcggccgc aagcaacgag 240

gaggaggcgt tggtcagtggt cagagaatcc accaatgacg atggccatcg cttgacgatg 300

gaatgctcca ctcccgctctc ctccagtagc ctttccactc gcaagaagcg cggggcgctc 360

agcctcttca aggcgatgtt cctgtccttc ggccggagcc acgac 405

<210> 1508

<211> 282

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-E11

<400> 1508

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aggcagcgca atcaaggcct gccgctgagg agacgacgac gactccttcg tcaggcgggc 120

gggggttacgg cgggtgcaacc ggcaaggctt cctcaggcgg cggcgggctg gacccccgacg 180
gcgaccacaga gggtgggctg aacgggaagg cgatcgagga gatcgtgaac gagcacaacg 240
tgttccgcgc caaggagcac gtgcctcggc tgggtggaa cg 282

<210> 1509

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-E2

<400> 1509

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cgtaagtgg acgggaagaa gcgcaactgg gggcaaattg tgcaaaccgg gaagacccaa 120
ctgcgagtca ctgacgttcc ggggtgatgac cagcgaccac cgcaaggcca cctcatggca 180
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agccactttc cctcctcttc ttcaacctgc atgccagcaa gcagccatac ggatgataac 300
atgcatcatg catgcatatt cattctttcg ctcatgcact ccgatacggg gccggagtta 360
aaaaaaaaatg taaatcaatg tgcaaattca aatgacatcc taaccagttg tgatcaa 417

<210> 1510

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-E3

<400> 1510

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cgcccttttc caacatccac agggggaaca ggaaaccacc ggcaatggcc tcaattccgg 120
caacaacctt cgccgtcatt taaccggtcc tcttctgtgc cgcggtggc accgccgtcg 180
acaacgacct ccccgactac gtcattcagg gccgcgtcta ttgcgacacc tgccgcgccg 240
ggttcgtgac caatgtcacc gactacatcg cgggcgcaa ggtgaggctg gactgcaagc 300
acttcggcac cggcaagctc gagcgctcca tcgacggggt gaccgacggg aacggcacgt 360
acacgatcga gctcaaggac agccacgaag aggacatctg 400

<210> 1511
 <211> 370
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-E4

<400> 1511

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 tcgcagtaaa cggggcggtt cccctacagt ttcaaagctg agatcacctg caaggcaact 180
 caagaccctt tcaataagca tcacaaacat caattcatcg ccttgcattt aaaaaatcct 240
 gaccagggaa acacccttgc gtctccact ttaacgtgct gtcagaaaac ccccttttcg 300
 caaccgggga taactcatac atggcccacc aggtttcccc tcccaaaagc ttgtacaccg 360
 taaaggtcaa 370

<210> 1512
 <211> 267
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-E8

<400> 1512

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 cggtttcttg tgtgggtggt gatcggtgaa ggaaggggaa cttaagatca ccctcttcgg 120
 gcttgggagg caatctcaga agacattcag gcctaagaac gatgcaccgt ctggcaacia 180
 ggctgtgcac ctgacgaatc acattcgtct aaccttatga agccggactt tgaggtatgc 240
 tgtccggttg ccaccagggg acgatct 267

<210> 1513
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-F1

<400> 1513

ggggtccacgc acgcgtccga aggaatccgc cgacatctcc agtgcaaadc atgtgggtcat 60
 tccgggtgga ttgatgccgg gggaccctgg gattgttcac cggaaaatct acacagcggc 120
 aaagcgactc tgagcgggtga cggagtgat tacgccatcc catttggaga agaacadgtg 180
 gttcaagtgg agccacatat caaggagttc gatttgatct aggtggcgtc tcccagttga 240
 ctttctgacg ccaaggatgg attttagatc ctgttatatt tatcttttat ttttgtaaga 300
 ctcccgctat gtaatatgta ctctgattat attgtgacat ttatctctat acactctgtt 360
 att 363

<210> 1514
 <211> 330
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-F11
 <400> 1514

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 caacgaacgg tgggcaagat gacgaacaat aagccctcc tctcctcgc cctgggggtcc 120
 gcgtccttg gtgcggcgcc ggccgccgcg aacgcccccg gccgggcgtt cagcaactgg 180
 gtggcgatga accagcagag ctacgcgctg tacgcgcaga aatccgtcgg ggaacggggc 240
 aaggagcccc tggacaagaa gctgtcngag gccgagaaga agaaggtcac gtacgtgggtg 300
 gaccccgagc ggcaagggca ctacaccaac 330

<210> 1515
 <211> 337
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-013-Q1-E1-C6
 <400> 1515

acgcacccga ccacgcgtcc gggccgctag tctgatgcgc atctgcacct acaccaacat 60
 cgtggataac acctccattg catcgagcgg atctgtgggc ctgttgtag tgccggggctg 120
 ggcccagcgc gctgatgcca atgccacctc cagcgtctcc gatctaggcg gatcagctag 180

cgggtggcgcc gctgcgcttg tggcgctgga tgaccatctc gatgtcagat tgtcaattgc 240
 gtccccgttat ctgatcatga acccttgact gggcatgacc atcgtcgact agttcatcca 300
 tcttcagga ctatctcatt gttcagcacc attccct 337

<210> 1516
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-C9

<400> 1516

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 tcctcgcccc tcttgctcct cgtcgcgggc ttggtggcca ccagtgcgag ggcggccaca 120
 ttcacatca ccaacaactg cggctcgacg gtgtggccgg cggccacccc ggtgggcggc 180
 ggcacgcagc ttgaccccg gcagacgtgg accgtggacg tgccggcggg gacccagtcc 240
 ggcaggggtgt gggggcgcac ggggtgctcc ttcaacggcg gcagcgggag ctgccagacg 300
 ggcgactgcg gcggcgact ctctgcacg ctctcggggc agcctcccat gacgctggcc 360
 gagtttcacc at 372

<210> 1517
 <211> 405
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-D11

<400> 1517

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 gtcggcgtcg tccccctctt tctctctcct gtgccccggc caagaaggca aggctgcctg 120
 ccgactggtt ggacctggac gaaggaggac gagaggctcg ctcgctcgctg gcggttggtta 180
 cgtgcgcgcg cgatggacag gggaaacggtg gaggacctca tacggcgggtt gctggacggg 240
 aagaagcaca aggcgacggg gaagaagggtg cagctgaccg agaccgagat ccggcacctc 300
 tgcgtcaccg ccaaggagat ctctctctcc cagcccaacc tcctcgagct ggtggccccc 360
 atcaacgtct gcggtgacat ccacgggcag ttctcggacc tgctg 405

<210> 1518
 <211> 456
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-D2

 <400> 1518

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 tgaagaagac agacgacgac accacgagcc ccaagaagag agccatcgcg gctgctgatg 120
 acgattgcaa gcctgccgat gacgagtcaa cgctgtggaa gcgcctcgtg gacggtatgc 180
 gcccgctccg cctccgcggg cagctggagt actaccgcc gccaccgcc ccaccgccgc 240
 tgggccacgc cgatgtgtac catgacgtga tcttcccgc gccgtcgag gcacggttcg 300
 gcttcgagat caaggagggtg ggcattgacca gccgctacgc gtccgctgag gatctgcacc 360
 agatggacag cgaccaggaa aaaggggtgct gaggggtggcg atgacggtga cagcagttgc 420
 ccacacgcca tcgacatgca ggcggaggag ttcac 456

<210> 1519
 <211> 353
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-D3

 <400> 1519

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 agctgccccg ggagcaggtc agcctgccgg actggggcat gcaactggaag cgcaagggcc 120
 tcatcgagaa gatcatggac cccaagctcg ccggcaccgt caaccggag tcgctcgcca 180
 agttcgccga gaccgccgag aagtgcctcg ccgagttcgg cagcgaccgc atctccatgg 240
 gcgacgtgct gtggaacctc gagtacgcgc tgcagctgca ggacgccaac ccgccccgatg 300
 gcgcgcggca tggcggcgac ggggacgacc aggacggcgc cgcggcggcg ggc 353

<210> 1520
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-D4

<400> 1520

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gacggcaccg cgaccgggag cgccggagat cccaaagcgg gcggtgcagt tcaccgggtg 120
cgcgcggtg gagccaccgg cgaagagcta cgtgatcgac gtgaaaccgg gcgtgaagtg 180
catcggttg caggagggcg agtggccccg cgtgtcggtc atcggcaaca tcatgcagca 240
agagcacctc tgggaattcg acctcaagaa catggaggtc aggttcatgc agtcgacctg 300
caccgggtga tcgtaaagct gacctcgatg gttttgttca gagcattcca aggggaaatg 360
ttttttctga acataaaaaa atagaaaacg aaaatgatgc tctgcataaa tcaactttct 420
gcacgagat 429

<210> 1521

<211> 454

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-B1

<400> 1521

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tcaaggagac cgggagcttc tccaagaact tcacgccagg tggcaagtca tcagacaagg 120
gtgaactgac aagggcccca agcaagctgt cgtctgcatt ttctggtacc caggataagt 180
gcgcagcatg ccagaaaaca gtgtaccgcg tggagaagtt aactctggaa ggcgagtcct 240
accacaagag ctgcttcaag tgctcgacg gcggtgcat cctgaccacc tcctcttatg 300
ccgcgtcaa cggcgtcttg tactgcaaga tccacttcgc gcagctgttc atggagaagg 360
ggagcttaca ccacatgaac aagaagagcc cgtcncagga ggttctgccg gacgtggctg 420
acgaggagca accgccggaa ccagcgccac cgca 454

<210> 1522

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B10

<400> 1522

gaccgacgcg tcagggcatc aacgacgagc cgatgacccc tgggcagtgc aacatggtgg 60
tggaaaggct gggcgactac ctgcttgaac agggcatgta actactacgt accagctgga 120
atgcatgtcg acgacgatgg tttcgagttt cgacttccaa taatagtaac aacaaagcaa 180
aggccttcct cccggcgat tggctttggc tcttctctc cagccataa gatatctagc 240
aattggtgac tcgccttaat tagttcgctt tgcttttgag gttgactcga ccattttgct 300
gtaacgtgaa ttgcatggac atgcaacgct ccaatggcct ttggaatgtg gaattttttt 360
cccgtttctg taattttcct ataaaatgaa gtaatgaact ggttcttata t 411

<210> 1523

<211> 377

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-B11

<400> 1523

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tctcggcgcc ggtcattggt tactctgtcg acagccatga ttattttctc gtcaagagct 120
tacaatgtct tgccactcat cncgatctgt aaacanatga tcaatgatcg tgcggccgat 180
ccgttccttc atttggtgga tgagagcaga cttacagctg ttaaggattc ttcaaagat 240
ccttcaaaaa tatatggatt cacagaggac aacaataatg cactgaagtc cctttcagaa 300
atagaactat cagaaagtca atctcgagaa tgcatagtct ccacaatcat gaacaacatc 360
gcaaatatgc tggatgc 377

<210> 1524

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B3

<400> 1524

gcgtccgatc ggatcaacaa tttcgtgaac cgggcaaggg cggctaaatt caacgcgcac 60

ataatcagcc acctgaagaa aaaaatgcct gcactgatgg gcaaggccaa ggcccagcaa 120
aagctgctcg acgggctgga tcaaaagtcc gccaaaggtcc agaaggagct gcacctgccg 180
ccaggggact tcccagagcg ggaggagtac agggagctcc tgagcgccta caacttcgac 240
aggttcgaga agctgaggcc caagatggtc cagggcggtg acgacatgct ggcctacgac 300
atccccgacc tcctgaagaa attcaagaac ccctacaact gaagccggaa accaatctct 360
ttgctcctcg gggaagggt 379

<210> 1525
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B4

<400> 1525

gcgtccgcac acacgtccgc tggagctccg ccccgccgat caccgcgcg gaacgtagcg 60
cccggtcca cagccgcgc attcgagctg ctgctcgcgc gcggctggtt cttctcgggg 120
ggattttctt tttgcgggca cctccgctc cccctaccg cctgcccgc agccgtctcg 180
ttttcggatt cgtttgtcc ggcggtggcc gacctgccgt gcggggcgcg gtgatgccgg 240
aggtggggca gtacgggtac aagaagaccg acggcatctg cgacagcgtg tcgggcgagc 300
ctgtgttcac gacagctctg acgatgtcaa ggctacagtg cgctctccgg gg 352

<210> 1526
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B9

<400> 1526

cagcccaggc atccgtccac ccggccgaga gcacaacgtg taccgtctct cccagcgtg 60
cgcgcgcgcg tggtcggagg ctgccgtcgc tcgcgtcggc cgcccccgcc ggccagcgag 120
agcgagggac aacgaccgac cgaccgacca gctcgagggt aatgaacagc cgcataccgt 180
tcctccagaa aatgcaccgc tggatcatcc ctagctgcgg cgacacccgc cagccgcgcc 240
cttcctcccg ccatcgagat gcgttcccga ggccggcgtc ggcgtcggcg tcggcgtcgg 300

cgccccgctc ccctcagaag ctgaggaagg tggggtcgga ggggacgctg gtgctgtccg 360
tgcccaagga cg 372

<210> 1527
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-C11

<400> 1527

gtcagccacg catcgctcat ccgtgcacgc cggcaatggt gtcctccgcc cgtgcgctca 60
tcggcctcct cgtcgccgcg gcctccctcg ccgtcgcgct ctcggatggc ggcggggatgg 120
cggcgccggt gtacgggtac gcggcgggga gcccacacgc gccggagAAC tgggggaagc 180
tgagccccgc gtacaagctg tcgggggagg ggaagcagca gtcgccgatc gacatcgctca 240
ccaagcaggc cgtccccgcc gccaccctcg acaccctcaa ccgcacctac ggcgccacca 300
acgccacgct catcaacgac ggccacgaca tcacgtggc gtcgagggc aaggttggga 360
cggtgacggt gaacggcaag gcgtacagct tcgagaagct gcactggcac 410

<210> 1528
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-C12

<400> 1528

gacgacgcgt caggctctta ggtaggtgca ttgcttcggt ggtccaccat ggcgacgca 60
gcggtggcca cgatgacgac taataagccc ctctcctcc tcgccctggc gtccgcgctc 120
cttggtgcgg cgccggccgc cggaacgcg cccggcgggg cgttcagcaa ctgggtggcg 180
atgaaccatc agagctacgc gctgtacgcg cagaagtccg tcagggacgg gggcaaggag 240
cccctggaca agaagctgtc ggaggcggag aagaagaacg tcacgtacgt ggtggacccc 300
agcggcaagg gcgactacac caacatcacc gcggcgctgg aggatatctc ggtgagcaac 360
accaagcgcg tgatcctgga t 381

<210> 1529
 <211> 306
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-H2

 <400> 1529

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 tccaaccgga gattcggcgg ccgccaatcc ggtaaccgtt gcaaccttgg ttgcgggggt 120
 cccaaaaaac ccaaaatttg gtggtggctt cggaggaatt ttggaaggaa ttggaaatgc 180
 caaaaccgga actgttgccg gcgttccaat tggaggatcc tccggtggcg ccgatgctgg 240
 cgctggcgct accgtangtg ctggtgtctc gggaagcgct aaagttagtg gtggcggttg 300
 aggaaa 306

<210> 1530
 <211> 324
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-H3

 <400> 1530

 cgcaaagggc aatccgctgc ggtcattgta ggttcctgaa ccaaaccctg gcaatgcctg 60
 aggctaaaca aatacggagc tacccttcag aaaaaaaaaag aaaagaaaga aattgaaaac 120
 cagggaaaaa aaatggaact ggcccattga ggaagcttga aaaccattta acaagaattg 180
 ccaacatata cttggacaac cttgttaaca aagtttaag gtttccaagc aaaaaaacc 240
 gcttgcaacc acaacattca tataattaat aagcaagggt tagaaaagag gcaacatggg 300
 caciaagatg aagaagggat tctg 324

<210> 1531
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-H4

 <400> 1531

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 acccggcggc ggcgatcgat ggctccgcgc agctcatcgg cggcgacgtg cctgtgcctc 120
 gctctcgccg cggccacgct ggcgctggcc caccgggcgc aaggaggagg accatcggca 180
 tcggcgccgg acctggacaa ggtcacggcc gagaccttct tggccatcga gatcgacggc 240
 aagcctgcag gccggttcgt gctgggactg tttggggaca ccgttcctaa aacagcagag 300
 aacttccgag cactttgcac aggggagaaa ggaattgcc agtccggcaa gcctctgtgg 360
 tacaaggggt cgacgttcca caggatcatc ccgggggt 397

<210> 1532
 <211> 293
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-H8

<400> 1532
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 cctcaacgtc catctcacga tcgacggagg tcacatgtcc gtcgaggact atgtcatccc 120
 tgtcaactgg gaagcgggac cctcgacaac ggggcccaag taagctttag agctgaaact 180
 actttaagcc tacctatgct aactatacta gattgcgttg gcttccatat agtgcattat 240
 acatgcatgc atttggccct gatatcgatt tgcgaccact tacctaatac aac 293

<210> 1533
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A10

<400> 1533
 caccggaaaa caagcaactt caacaacaaa agccaaaaca acttgcaatt attaattgcc 60
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 gttcacaatc tgatgcagct acaatcataa aagcgggtca ttcaaaagggt gcaatctaca 180
 ttaggcctgg ggaaataatc ccgaattacc tgaaaccact agcaccaaaa ccactttcct 240
 cggtaccacc gatgaaccca gggcagctca gacgatttgg tgattctgct gtcaccaagg 300

atgcaatctt cggttcttcg gatggcacgg acgatgacga cgaagaagac actgatgacg 360
 aggaagacga cgagctgact gacaacga 388

<210> 1534
 <211> 329
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A11

<400> 1534

cctccacgcc ctcttgggct tgttgtctgc cggctctctc ccgcaggcgt tacggaacgg 60
 caagggcaag gtgcatggcg gctgtgccgt caaccgctg gttgctggca tctgctctcg 120
 cgccccattc ccagaggttt gcaactgccac agccggggcg catgcatcca cttaccgggt 180
 catcgaccat ttggccgtgc tgaacatgca agtggccgcg ttcgccaagc gcacatcgca 240
 tgcgcggaaa cacgtcgcgg tggcgggccg cactattcca ccgccgaag cacagggcct 300
 cacaacctgc gacacgatgt acatgaaca 329

<210> 1535
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A12

<400> 1535

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 aattaatgga agaagcggca gcatggaatc aaccggccgc gtccttggg gcaacccctc 120
 gcgctagtgg ctgccaccgc cccacaggta gcggaggcaa agaagaagag agcggcggag 180
 agcggcgagg cggcggatgc gaagaagatc caggacgact tctgctcgac gctgtgcgag 240
 ggcaagaagg ggacggacct ggtcgtgtgc aaggagtcct gcgcgctctc ccagcagtcc 300
 aacctggtgc tgtacggcag gattcagtgc aaggggcaaat gcaccgagca gaagggcatc 360
 ac 362

<210> 1536
 <211> 341
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A2

<400> 1536

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cgggggcgag cgcttccgct ggccccaagt cctcttccat gcatccttca tcgggctgga 180

agctgccggc atccaccata ccacctacaa ctccatcatg aggtgcgacg tggatattac 240

gaaggacctg ttcggcaaca tcgtcctctc cgggtggcacc accatgttcc ctgggatcgc 300

tgacaggatg agcaaggaga tcaactgcctt ggctcccagc a 341

<210> 1537

<211> 329

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A3

<400> 1537

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gattacttga ggacaaatth aaggctcggt agaaactgcg gggaatggac attgcaagat 120

gtggtgtggt ataagatagg caaaatgtgt gattatthtt tgtccgaggt tatcaccccc 180

cttggccccag acaagatgat aagatgtcaa tgtaacaagc cgtctgagct tctgtaagta 240

aatgactggt gctgcatgcc ccctgtgtac atgtagctgt ttgagcagaa ttccgthtgc 300

atgaatcgtg tgatcaccag ccagggatc 329

<210> 1538

<211> 308

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A4

<400> 1538

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tggcgagcgc ttccgctgcc ctgaggctct cttcgagcca tccttcatca ggatggaacc 180
 tgccggcatc cacgacacca cctacaactc catcatgaag tgcgacgtgg atattacgaa 240
 ggacctgtac ggcaacatcg tctctccg tggcaccacc atgttccctg ggatcgctga 300
 caggatga 308

<210> 1539

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A5

<400> 1539

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 gtcacctacc gccgggtggt gcgcaacgtc ggcagcaact ccagcgcggt gtaccagccg 180
 acgatcgcca gcccgtagcg cgtggatgtc acggtgacct cgagcaagct cgcgttcgac 240
 gggaagcagc agagcctggg atacgaaatc accatcgag tgtcaggcaa cccggtgatc 300
 gtggattcca gctactcggt cggatccatc acctggagcg acggcgcgca cgacgtcacg 360
 agccccattg ccgtgacctg gccgtccaac ggtggagcag cagccatgta gtagactgat 420
 gctgttg 427

<210> 1540

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-H12

<400> 1540

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 ggagagctgc atttgttttc ccattgtcgt ttttgtccaa cctgacaaaag aagtctccat 180
 tggagaaaat aacatttaga cagcaaattg taatatggtg ggccggactg atgagaggtg 240
 ccgtctccat tgctctcgct tacaacaagt tcacgagatc tggacacact gagctgcacg 300

gcaacgcgat aatgatcacc agcagcatca ctgtggctct gtttagcact atggtgtttg 360
 ggatgatgac gaagccattg atccggctgc tgctccctgc ctgcagcaac a 411

<210> 1541

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-F9

<400> 1541

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 cggcaacatg aacccccacca tcatcagcca gggcaaccgc ttcacgccc cgcacgaccc 180
 caacgccaag gaggtgacca agcgggagta cagccgtac aaggactaca tcgagtgggt 240
 gtggaagtcg cagggcgact tcatgatgaa cggcaccttc ttcaacgagt ccggcggcca 300
 gaacgagcgc aagtagaca ggttcgactt catcccgcc aagcacggcc gctacgtcgg 360
 tcagctcacg cacttcgccg gactactcaa gtgcatcatc agccagccgt gctactacac 420
 atcggcccg tc 432

<210> 1542

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-G10

<400> 1542

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 gtccctgtcg tcgtcgtcgt cgtcaacgaa tccacacaag gaaaggatgg agaagaagcc 120
 gaccatcctc atgaacaggt acgagctcgg gcgcacgctc gggcagggca ccttcgccaa 180
 ggtgtaccac ggccggaacc tcgctgccg cgagagcgtg gccatcaagg tcacgacaa 240
 ggagaaggtg atgcgcgtcg gcatgatcga ccagattaag cgcgagatct ccgtcatcgg 300
 cctcgtccgc caccccaacg tcgtgcagct gcacgaggtg atggccagca agagcaagat 360
 atacttcgcc atggagtacg tccggggcg 389

<210> 1543
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-G12

 <400> 1543

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gggtccttcg acatcaccaa gttgggcgcc tccggcaatg gcaagacaga cagcacgaag 180
gctgtgcang aggcattggc atcggcggtg ggcggcactg ggaagcagac aatcctcata 240
cccaaggggtg acttccttgt cggacaactc aacttcacag gcccttgcaa gggcgacgtg 300
accatccaag tggatggcaa tctgctggcg accacggacc taagccagta canaggacat 360
ggtaattgga tcgagattct acgtgtggat aacctggtca tcaccggcaa aggaaacctt 420
  
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<210> 1544
 <211> 458
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-G2

 <400> 1544

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cccttcggca acttcggccc gggtccgac ttctccaact tcaagctgcc ggcaactttc 180
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tggagcatct ccaccacgcg gccccccatc ttcggttcg cgccctacaa cccggtgctc 360
ggggagacgc accacgtctc caccgccgcc ggcctcaacg tgctcctgga gcagggtctcg 420
caccgcccgc ccgtgacggc gctgcacgcg acgcacgc 458
  
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<210> 1545
 <211> 419

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-G4

 <400> 1545

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 ggggttcccc ggcgcttggc ccatcatcag cgagaacgcg ggcgtgtccg cgatgcacct 180
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 gctgcggctg cccaagggga actgccgcct cgatctccgc agcaagcagg tcggcgccaa 300
 ggactgcgcc gcgcacgccg tcgagtttga ttacgcgaca ggcggtgtca gggccctcaa 360
 ggtcttgacg gacgtgtggt gctcgtcngg cgcgctcgac gccgaggga acctgggtgc 419

 <210> 1546
 <211> 462
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-G7

 <400> 1546

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 gctgctcgac tacgccatcg acgacctccg gacgacgttc gacaggctcg gcggcttcga 120
 gatgaccaac ttcaagagcg ccgtggacga cctccggacg tggctgagct ccgcgctcac 180
 gtaccaggag acgtgcctgg acgggttcga gaacaccacg acgcccgccg cgggcaagat 240
 gcgcaaggcg ctcaacagct cgcaagagct gacggagaat atcctggcgc tcgtggacga 300
 gttctccgag acgctcgcca acctgggcct gccgagcttc cagcgccggc tcctcgcgga 360
 gcacgctcgc ggcgcgccct cctggatgcc cgacgccaag cgccggctgc tgctggtctc 420
 ccccggcgac aacggcttca ggcccgcggt gacggtggtc aa 462

 <210> 1547
 <211> 190
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-H10

<400> 1547

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ttgtgtacaa caaatgagta catgtgtaat ttttcattac aggtgaaaat ggacacgggg 120
tgtcgcgaaa tagggctcaa ctcagattta catttttaaac gcgtatatgt gcatcatcac 180
agggacacgc 190

<210> 1548

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-F8

<400> 1548

cccacgcgac caaccacgcg tccgcgggag cacagagcta gctagccagc cagccagcag 60
ccagcttget cgccgcgccc gtcctttcttc ctgcctctcg ttccgttcgc ttccgtcgcg 120
cccgcgcgcg ccgcgcgatt cagggatgga gatgaagaag atcgctctgc ccgtcctcgt 180
cgccgcctcg gcggccaccg tggcgctcgc cgcgagggt ccggctccgc gccccaccag 240
cggtcctctc gccgtcgcgc ccgcgcgcgc cgccgccttc ggggcgcgcg tcgcctcgtt 300
cttcgcctac tacattcagt gagccggccg cagtcggtcg cccggaggcc gacgaagaga 360
cgattcggga cagagagtga catggctgcg cgcattccga tgcgtgggca tgtttttgat 420
tcgacacacc ttttgtcttc gttttc 446

<210> 1549

<211> 345

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-E5

<400> 1549

cacgcgtcct ctgactcgtg ggcggactcg tgggttcgtc cagccttctc ggtctttctac 60
cccggtggtc atcacatttc tcacacttcg cggccacctc tcattctcggg gtactgggtca 120
cgctcctggt taaataatgt tgtcttctgc agttgaattt gcctcgtcat ctgctcacat 180

cacttcgtca gtttctattc gagatgacga ggtagctgat ggatagggcgt tcatagaagc 240
tcttacatac gttaattgtg tgtcgcactg ttatggctat catagatgtg tatagacgat 300
tgacaatgat aagattgggc acttctcctg ttacggccag tactt 345

<210> 1550

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-E9

<400> 1550

cacgcgtccg gtacctggac gccaaaccgt ccgaggtggt caccgtcttc ctcgaggact 60
acgcggcgcc agggtcactc agcaacacct tcaatgccgc cggactgtcc aagtactggt 120
tccccgaggc tcaaattgct agccctagta agggcggcgg tgactggccg ctgctcaggg 180
acatgatcgc cgataaccac cggctcatcg tgttcacatc caagaaaggg aagcagggga 240
cggagggggt cgcgtaccag tgggactacg tcgtggaaac ccaatacggg agcgagggca 300
tggcggatgg cagttgcccc aagcggaccg agtcgaagcc catggactct aaggcccagt 360
cactagtgtc gctgaacttc ttcaccagca acccgagcca aagctgggccc tgcagcaaca 420
actccgcgcc gct 433

<210> 1551

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-F10

<400> 1551

tgcaagattg gggccttgag atcgttctcg ctggagaaga tacactactg gagggagaga 60
gcgtccggca tgagctcgct ggcatacttc ctgtccaaag acacgataga tcaacttcaac 120
acgataatca agcccatcgt ctacctctcc atgttttact tcttcaacaa cccaagggtca 180
tcgatctggg agaactatgt cgtccttctt gcgctcgtct actgcgtgac ggggattgga 240
tacaccttcg ccattctctt ccagccaagt tctgcgcagc tgtggtcggc gctccttccg 300
gttgttccaa cctgatagc aaccagcaa aaggacacct tcatcgcaaa cctgtgctac 360

<210> 1552
 <211> 417
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-F12
 <400> 1552

acgcgtccgg catgtacaag gaccatggta attggatcga gattctacgc gtggataacc 60
 tggatcatcac cggcaaggga aaccttgacg ggcagggccc agctgtgtgg agcaagaact 120
 cctgcaccaa gaagtacgac tgcaagatcc ttcccaactc gctggatgatg gacttcgtga 180
 acaacgggga ggtgtccggg gtcacgctgc tcaactccaa gttcttccac atgaacatgt 240
 accggtgcaa ggacatgctg atcaaggacg tgaccgtgac agcgcccggg gacagcccca 300
 acacggatgg catccacatg ggcgactcat ccgggatcac aatcacagca ccgtcattgg 360
 cgtcngcgac gactgcatcc tcacgagccc cgggacctca aaggtgaaca tcaccga 417

<210> 1553
 <211> 429
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-F2
 <400> 1553

cgggtgcttcg gcccgcgggc ccaaaatcgc ctcatcgaca accccccctt caaggtccc 60
 gttctcaatg ggtctctctt caaacaggat tgggagggag agcctcaagg cgggggatca 120
 tatctactcc tggagggcgg cgtgggtcta cgcgatcac ggaatatatg tgggcgatga 180
 taaggtgatc catttcacaa gaggaagagg acangaggtc ggaacaggaa ctgtcgatga 240
 tattattctt gtgagttcca ccccaaacg aagcaacacg ccttgcccgg tgtgcaccga 300
 cgaaaccagc gacagcagca cagagacgaa cggcgtggta tcctcctgtc tcagctgctt 360
 cctagctggg ggtgctctct accgtttcga gtacgcagtc aaccgggcgc tcttcctcgc 420
 caaagcgcg 429

<210> 1554
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-F3

 <400> 1554

 cggtcagaac gaacgggtcg gccacgcgtc cgaggttaagg tcccggccctt ttccgacatt 60
 cacagggggg acaggaaatc agcggccatg gcctcgattc cggcgacgac cttcgccgtc 120
 atcttatccg tcctcttctg tgccgaggct ggcaccgccg tcgacaacga cctccccgac 180
 tacgtcatcc agggccgcgt ctattgacgac acctgccgcg ccgggttcgt gaccaatgtc 240
 accgagtaca tcgcggggcg caaggtgagg ctggagtga agcacttcgg caccggcaag 300
 ctcgagcgct ccatcgacgg ggtgaccgac gggaacggca cgtacacgat cgagctcaag 360
 gacagccacg acgaggacat ctg 383

<210> 1555
 <211> 210
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-F4

 <400> 1555

 acccacgcga ccaaccacgc gtccgcttga tcacatcgct ngcttgccgt ccacctccct 60
 cgctttttgc tccactcccg cgtccatctt cgctctcttc ctgttctgtc gtttcgttgg 120
 ggggggtggg gctgccttcc gagaaatttg ccccgaggag atcgtccttg ccctcttcga 180
 cttgcatctc tggtagaccg gggtttatattt 210

<210> 1556
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-F5

 <400> 1556

cccacgcaac caagacaaga tggcatgcac aaacaatgcg atgagagcct tgttcctcct 60
 ggtcctcttc tgcacgtgc atggtgagaa ggaagagtca aagggcatcg atgcgaaagc 120
 gtccgggcct ggtgggtcct tgcacatcac caagttgggc gcctccggca atggcaagac 180
 agacagcacg aaggctgtgc atgaggcatg ggcacggcg tgcggcggca ctgggaagca 240
 tacaatcctc atacccaatg ggcgacttcc ttgtccggac aacctaactt aacacgccct 300
 tgcaagaggc gacatgacca tccaggtgga tggcaatctg ctggcgacca cggacctaag 360
 ccagtacaag gaccatggta attggatcga gaatctacgc atggataacc tgnatcatcac 420
 cggcaaggga aacctt 436

<210> 1557
 <211> 463
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-012-Q1-E1-F6
 <400> 1557

attcgcccg tgcacacgc gaccgagcag catttcgagt aacacagttg agcacgacga 60
 tgggatccct cgctaataac atcatggtcg tgggcgccgt ccttgccggc cttgtcgtcg 120
 gcgggtcgtg cggggccccc aaggtgccgc ccggcccca catcaccacc aactacaacg 180
 gcaagtggct caccgccagg gccacctggt acggtcagcc caacgggtgcc ggcgtcctg 240
 acaacggcgg tgcgtgcggg atcaagaacg tgaacctgcc accctacagc ggcacgacgg 300
 cgtgcggcaa cgtccccatc ttcaaggacg gcaagggtg tggctcatgc tacgaggtga 360
 gatgcaagga aaaacctgag tgctcgggca atccagtcac ggtgttcac acagacatga 420
 actacgagcc tatcgtctcc taccacttcg acttgagcgg caa 463

<210> 1558
 <211> 466
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-E4
 <400> 1558

ggtcacaat ccgggtccgn caccggtccg aaggaccgca acgcaagcgc cgacgccaag 60

gactcccca ggggaaagaa tgggtcaacc aaaaggcaaa acaaaccaaa tttaaaggaa 120
 ttcaaaccaa aaaattgcaa ggcgtataaa gaaaatcaga aggaacctgt aacaatgatg 180
 gaaggatctc cacctgatgt tgggtcaagat ggtgatgatg agcaaggat tgatccatct 240
 tgggctgctg tagttacgcc ggttttacga gtcaagacaa tttatatcag ttcggcgatt 300
 cttgctgcga agagtccttt ctttttcaag ctttttctcaa acggcatgaa agaatcggac 360
 cagagacatg caacccttag aaatactgac tcagaggaaa atgccctcat ggagctttta 420
 agctttatgt atagtggaaa gttgacaact actgagccca ctcttc 466

<210> 1559
 <211> 456
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-D2
 <400> 1559

cggggggcac aagatcgtgt atcaaatcga gaagggtgc aaccccaact acctggccgt 60
 gctggtgaag tatgtggcgg acgacggcga catcgtgctg atggaaatcc aggacaagtt 120
 gtcggctgag tggaagccca tgaagctctc ttggggcgcc atctggagga tggacactgc 180
 caaggcgctc aaggggccct tctccatccg cctcaccagc gagtccggca agaaggatcat 240
 cgccaaagac gtcaccccg cgaactggag acccgatgcc gtctacactt ccaacgtcca 300
 attctactag actttgaatt cnettcgatt catccggcac agcgggctat ggaccttcag 360
 cagcaagcta attaagttgg cagcatgcac cgctaactt atatactact gagacttcca 420
 aattctagta tatgtaatcc ttttgttcgg gttcaa 456

<210> 1560
 <211> 258
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-012-Q1-E1-D6
 <400> 1560

acccttgccc gcaaccatag caacacggct gcgctgtgct gactccttct cgcccggcaa 60

catcgatcgc ggatgtggca acagcagaaa cttatcagcc atggggaagt cggcgtcggg 120
gatggtcgtc accaactagt ggatgctcac tttccaggag ctcaaggcga agctcaccat 180
ccggttcac acattctcca tcaacgatga catcgaccaa gtcgtcgtcg acacgatgtg 240
gcaacccggc gacgtcta 258

<210> 1561
<211> 396
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-012-Q1-E1-E12
<400> 1561

cacgcgtcca ccatcgcgtc cggcgatgct ctgtacgcta tggagctgac tctggctctg 60
gaaaagctgg ttaatgagaa gctgcacagc ctgcatgggtg tggcaacaag gtgcaatgat 120
cctcagctga tagacttcat cgagagttag ttcctcgagg agcaggtgga agccataaat 180
aaggtctcca agtatgtcgc gcagctgagg agagtgggca acaaggggca cggggtgtgg 240
cactttgatc agatgctgct tcaggaaggg gcctgaaggc caacaagggt ggcgtggacg 300
gagctgagct ctgggtgtgt tattttcttt tctttccagt tggttagtgt tttagttgta 360
gaacggtgtt gcgttgccca catgacatga tggatg 396

<210> 1562
<211> 430
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-012-Q1-E1-E3
<400> 1562

ctcgtgctc tgattctcgt cgtcgccttg gcgacttgta caaacaattc tgttgatgcc 60
cgcttggtca accccatcgt caccctcaag gccgatggct catctccac ctctggcaat 120
ggcgtcgcgc tgatcagctc caccaaccaa gatgaacttg gagcgttatg ccaacagatg 180
cactacaaga cgttgtgctc cacgatgacg aactgcctg nggtgactac gccagagcaa 240
ctcttagatg catccctgcg gattacagcg gtgaaggcag cgatggcgga gatgaagcta 300
gacaatgcaa taaaatcagg cagtgtctca ggtaaccgga tgatgtcgtc gctaaagaca 360

tgcaaggaga gctacgcgtc gctggtaaac tccatcaata ccacgcggaa cacgctcaaa 420
agcggcggca 430

<210> 1563
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-C10

<400> 1563

tagcggctctg atcgtatccg ggtggcccca cgcgtccgat agtagcgaaa ggcaagggac 60
gtaagaagtc gtctaattct tggatcgaat tagacgactt cttcgtccct ctcttcatta 120
gcacgctaac ttgtaatctg caggatctaa gcaaagactt gatttagtta tggacggatt 180
ggtaggcctc ttgaaagttc gcgtgggtccg gggatatcaac cttgcctacc gcgacgcaag 240
aggcagcgat ccgtatgtcg tcctacggct tggcaagaag aaactgaaga caagcgtgaa 300
gaagagattc gtgaacccca aatgggaaga agagctaact ctgaacgtca cagattccaa 360
ccaaccactg aagctggaag tgttcgacaa ggacaccttc agcagagacg aacccat 417

<210> 1564
<211> 459
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-C3

<400> 1564

gggccggcca aggcgtcggg gtaaattctcg gacctggagc gcaccgtcac gtcgctccag 60
acggaggtgt cggcgtgtc cccgcgcgtg gcgttctctg accaccagcg ctcgctgctg 120
acgctgggga acagccacct gaggcagcgg atcgcggcgc tcgcgcagga caagatcttc 180
aaagatggtg accgccattg ccggccgccc ctgctctctc cgactacgac cctcgccgct 240
catcaggagg cactgaggaa ggagatcgag aggctgaggc aaatctacca gcagcagagc 300
ctgaagagcg gcagggagcc cgacgcggcc ccgtcggtec gcgacgacaa ggacatgatc 360
ggcagcgagg ggaccgccgc ggccgggccc gccctcgtga tgaggaggag gtgggtggggc 420
gacacgtcca gacatccgag tcggtcgtg tagtcgggg 459

<210> 1565
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-C4

 <400> 1565

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 cgtcgcctat cgcgaaact acttctcgtc atttgctgtc gagggagggt aggaaacgaa 120
 tgggtgttcat gctgtcgcga aagacactat ctttcatgct gataaagggt actgacggaa 180
 gagactgtc ctcgcgatta atacttttcc tgatcatcaa gacgaaatta ggaaggatat 240
 tcatcagctt aggcacatct actatcatca tcacctgaga cacagtatga atgccaaactc 300
 ggatctgtct gtccgcgaca tctggacatg attctaagcc aggggaccgt cttgccagct 360
 taacttcctt gatgaagatt aggtagtcca actacatat 399

<210> 1566
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-C9

 <400> 1566

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 gatccagcac tcccgcgacc gctgccgcgt cccgctcacc ctcagggggg gcatcaatca 120
 cagcggcgtc cgctacggcg ggcccattct cttcctccgc aaggagccgc tccccaactt 180
 gcagcaagct gtcgcgcgcc tacgacctct acaacgagac gtccgataat tcccaagcat 240
 gcaaacaaac tttctctcgc tctctttttt tttaacaaaa acatcccata tacatatagc 300
 acatttgttt ccgtttgttt atgcccgcat gcatgctatc agacatcctt cctaagaaaa 360
 atttatgtta tttccatctc gcattatttt agtatctacc attcaagttt t 411

<210> 1567
 <211> 452
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-D1

<400> 1567

cacgcgtccg accaagcgtc cgagcgcaca cacacacaac cagatctccc ccaaattccac 60
ccgtcggcac ctccgcttca agatgcagat ctttgtgaaa accctgactg gcaagactat 120
caccctcgag gtggagtcgt ctgacaccat tgacaacgtt aaggccaaga tccaggacaa 180
ggagggcatc cccccagacc agcagcgggt catctttgct ggcaaacagc ttgaggacgg 240
gcgcacgctt gctgactaca acatccagaa ggagagcacc ctccaccttg tgctccgtct 300
cagggggaggc atgcagatct ttgtgaaaac cctgaccggc aagactatca ccctcgaggt 360
ggagtcctct gacaccattg acaacgtcaa ggccaagatc caggacaagg agggcatccc 420
tccagaccag cagcgggtca tctttgctgg ga 452

<210> 1568

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-A5

<400> 1568

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caacgccggc cacgccaagc ccctgacgcc tggcggggcg gtggtacacc acaaccacgg 120
taagttcacg gccggggcgt ggtaaccgc ccacgcgacc ttctacggcg ggcgggacgg 180
gtccggcacc acggctggcg cgtgcgggta caaagacacg cgcgcgcagg ggtatggcgt 240
gcatacggtg gccgtgagca cagtgtgtt cggcgactgc acggcctgct gcgggtgcta 300
cgaggtgcgc tg 312

<210> 1569

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-A8

<400> 1569

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ctcgtatctc acttcattag cacgcgcacg tgtcatcggc aggatctaag catgtgactt 120
gagtgactca tgggtccgatt ggtaagcgtc ttgaagggtc gcgtgggtcat gggcatcaac 180
cttgccgaac gcaaagcaag agggagcatt acgtatgtcg tccgacagca tgtcacgatt 240
acgctgaaag aaggcgtgac cgaaacatgc gtgcacgaca tcagggacca agacaaatat 300
ccgattggca tacatcttag tcaaacattg a 331

<210> 1570

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-A9

<400> 1570

ccgggtcccc ccacgcgtcc gatagtctca ccctccctcc ctcacacaaa taataaggaa 60
aggtcccgcc cttttcctcc gacatccaca aggggggagg ggaaaacacg tacattcacc 120
cggcggcaat aatggcctcg gttccgggtc cggcgacgac gaccgccgcc gtcacctat 180
gcctatgcgt cgctctctcc tgtgccggcg ctgacgaccc gaacctcccc gactacgtca 240
tccagggccg cgtgtactgc gacacctgcc gcgccggggt cgtgaccaac gtcaccgagt 300
acatcgcggg cgccaagggt aggctggagt gcaagcactt cggcaccggc aagctcgagc 360
gcgccatcga cggggtcacc gacgcgaccg gcacctaca 399

<210> 1571

<211> 313

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-012-Q1-E1-B1

<400> 1571

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gtgggtccacc ccacgtcac cctcgaggcc gatgggtcat ctccacctc tggcgatggt 120
cgtcgcctga tcagctccac caaccaagat gaacttggag cgtttatgcc aacagatgca 180
ctacaagacg ttgtgctcca cgatgacgac actgcctgng gtgactacgc cagagcaact 240

cttagatgca tccctgcgga ttacagcggg gaaggcagcg atggcggaga tgaagctaga 300
 caatgcaata aaa 313

<210> 1572
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-B12

<400> 1572

cacgcgtccg ataaatcggt ctacactcaa acaatatcgt cacggtcacc ctcaacgatg 60
 cagatgacat cgaagcgagg taggcatctc tgatctagga gcaatgtcgt ggtaagctta 120
 cgtgaggaag cagctgatat gtgacatcaa gggccagcaa ctcacggcgg cgacgatctg 180
 ctgccacaac tgattcctct gggagcagag catcgcgttc cccgacttca tgaccgaaga 240
 catgggcaac atcatgaatg acttcgacga gccagagcac ctcgcgccga catgcctggt 300
 cctcggacct agcaagtaca tggatcatcca atggtaacct ggtgccgtca tccgtggcaa 360
 caacggatta ggatgcatca acg 383

<210> 1573
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-B3

<400> 1573

caagcgtccg gaaccagcag cctccaatag gagccagcca gagaaactaa taaaactctc 60
 accgccgcca tccgagagaa caagccaacc gaccccgccc ccaaggcaat ccgtcgccga 120
 cgtaccaccg ccaccgcagg agcgagatgg agatgaacag gatcctcttc gccgtcctcg 180
 tcgacatcgc cgctcgggcc accgcagtgc tggcctccac cgaggccgcc gccgcggggc 240
 ccccaactgc ctcagagtcg tccgccgagg ctcccgctgg cgctggcgct ggcgctgccg 300
 ctggcgccgc cgccgcgggg cctccgcca tcaacggcgc gcccgcactc gcggccgagc 360
 cagctgcgct cctcttctcg ctctcgcct actacctta ctaagcgtgt gcgtgctta 419

<210> 1574

<211> 447
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-B5

 <400> 1574

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 gcctcccctt cctctagcag tggcgaggca ggaaggcagg ccgggtgtcc tgcctcccctt 120
 gcgcgcgctc tcacgaccca tcccgtcgtg cgtcatcgag ctccggcggg cgggccatgc 180
 acgcgtccag ctagctcaca cagcgccgctc tcgaccggct gccggtgctc caccgcggccc 240
 gcgtccacat cacggcgggc gggcgcgcgcg gtgaacggtt tcctctccgc atgaccctgt 300
 gatggtcggt gggttcctgc ggcgcggcca cagcctcgac aggctcctgt cgangangcg 360
 ccgggccttt tcgccaagcc cctcgttctc gtctctctcc tccacgccgt cgtctccgcg 420
 tggcagcagc gtcaggagcg gcatgat 447

<210> 1575
 <211> 200
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-B7

 <400> 1575

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 gcagtcgcca tggcagggtc ctgaccatat cagttgacga agtcattgctc ggaggcgggt 120
 gcttcgctct cagccttggtg caggccatcg ctgtctcctt ggggcggcat gctcactgag 180
 gagctgcggc tgtcaacctc 200

<210> 1576
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-H10

 <400> 1576

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ttccttctag cgctcttctg caccgtgcat ggtgagaatg caaactcatc ggacatcgat 120
 tcagaagcgt ccgggcccgg tgggtccttc gtcacaccca cgttggggcg ctctggcaat 180
 ggcacgatgg ctatcacgaa cgctgtgcaa gaggcgtggg catcagcgtg ccgcggcacc 240
 gtgaagcaca cgatcgatcat ccccaagggc gacttcctcg acggaccact caacttcaga 300
 ggcccatgca agggcgacgt gaccatccag gtgaatggca atctgctggc gaccacggac 360
 ctaagccagt acaaggatca ttggtattgg atcgagattc tactcgtgga caaccttgtc 420
 atc 423

<210> 1577
 <211> 454
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-011-Q1-E1-H2
 <400> 1577

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 cgtccgcgct ccttgggtgag ggcgcggccg ccgcgaacgc gcccgggcggg gcgttcagca 180
 actgggtggc gatgaaccag cagagctacg cgctgtacgc gcagaagtcc gtcggggacg 240
 ggggcaagga gcccttgac aagaagctgt cggaggcgga gaagaagaag gtcacgtacg 300
 tgggtggacc cagcggcaag ggcgactaca ccaacatcac cgcggcgtg gaggatatcc 360
 cggtagcaaa caccaagcgc gtgactctgg atctcaagcc cggcgctcag ttccgcgaga 420
 agctgttccc tgacatcagc aagccgttca tcac 454

<210> 1578
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-011-Q1-E1-H4
 <400> 1578

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tgaatttggga aattttccga gatttgttca ttgcttagtt gaactatatg aggccgtttc 180
 ttgggcggtg attcctgaag cattcacagg ttactataag aaagaaccat gacgtgttga 240
 tatttctatg aaatattgta ttttcatata atagtgttaa agcttctctt tgtctgtgaa 300
 tctataggca ggtcaatact tcgtcattaa tttgtaccg atttcttgtc attcatttca 360
 taaaaacatg tagttttgat gtatttggtc ataactaaca attatctatc cttctgaact 420
 aaactagtat c 431

<210> 1579
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-011-Q1-E1-H6
 <400> 1579

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 gacaccatgg ggagctcgag gaccatcggt gcgtccccc tgctcctcct cgccctctc 180
 ctctgggtt tcgcggccac cgccgaggcc cgcggtgtcc ccgagctgtt tggcgaggac 240
 caattccagc ggacatgcaa ccaggtgcac ttgaggaaga tgtgccagag cttgacgagg 300
 ctcccgaggg tgaccacgcc gcgcgagctg ctgctggcgt cgatgcgcgt cgcggcggag 360
 aaggccaggg aggccaagag ccgggtggac gagttcgcgg cgaaggaaca cgagggccgg 420
 ccgat 425

<210> 1580
 <211> 440
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-012-Q1-E1-A11
 <400> 1580

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 ttgcgccact gctcgttatc ctctcttgc attgcattgc aggtcgtagt tgagcagcag 120

caaccactgc acaggatgtc gtggcagacg tacgtcgatg agcacctcat gtgcgagatc 180
gagggccacc acctgagctc tgccgccata gtcggccacg acggcgccgt ttggggcccag 240
agcaccgcat tcccacagtt caagccagag gagatgacca acatcattaa ggacttcgac 300
gagcctgggt ttctggcccc gatcggcctc ttccttggcc ccaccaagta catggtcac 360
caaggcgagc ccggcgctgt catccgctgg aagaaaggat ctggaggcat aactgtgaag 420
aagaccggac aggcgctggt 440

<210> 1581

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-G8

<400> 1581

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ctcttggtgc tagccctcgc gctagtggcg gccaccgccc cacaggtagc ggaggcaaag 120
aagaagagag cggcggagag cggcgaggcg gcggaggcga agaagatcca ggacgacttc 180
tgctcgacgc tgtgcgaggg caagaagggg acggacctgg tcgtgtgcaa ggagtctcgc 240
gcgtctctcc agcagtccaa cctggtgctg tacggcagga tccagtgcaa gggcaagtgc 300
accgagcaga agggcatcac ggcgccggcc atgaaggtct gccaggagga gtgcgacaag 360
gcgtacgtgg tgaaggcggc cgaggtcacc aaggcctgca gcgtcacctg cgccaaggag 420
aagaacccgc gctc 435

<210> 1582

<211> 433

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-F3

<400> 1582

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tgccggttcc agctgccggc caccgacgac aagagctcat gcagcggcgg cgacggtggt 120
ttcgtcagtg tcgatgcgga tcgtgaaggc agtgacaacg gcgnggtga tggatatggca 180

agctctccgg gcaacgccga gctagctgaa gctgaagaga gtggcaggcg gttgccgcca 240
tccttgcaagt ggetcaacag cctgttctcg ccgtcggcgc agtcctccgg tagcggcggc 300
agcagttcgc atcattggga gaactaagca atattgccat ggttgctgcc gcttgaaagc 360
ttggcccgtt ggttggtccc aatgtacata ngaaggagca ngagcatgcc gggttggtgc 420
catgtaaaaa tct 433

<210> 1583
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-G11

<400> 1583

ttcacgggcc aaccacacg tccatgctgg gatcacacga cctgaacaag tacacggcca 60
gctggatcga attgtctcac gttaacaaca tcgggatcac cggcgcgggc acgctggacg 120
gccagcggac cgcggtgtat agcacgagga agaccgacaa cgtgaaggcg atgccaaca 180
cactggtgct gtttcacgtg atcaacgcca ctgtcgccgg aatcaaacta ctcaactcca 240
agttcttcca catcaacatc gacaactcag atagcatcac cgtgaaggac gtgaacgtca 300
ctgcgccccg cgacgttgag aacacggac 329

<210> 1584
<211> 421
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-G12

<400> 1584

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ccctgctgct ccacctgccg ccgcctcgga gccgaagaaa gacaaagcag aatcggatca 120
ttcagactca tcgtcatctt cttcggacga cgaagaggac gaagaggagg aaaccgagga 180
gcaatgataa gggcatgcag gtgtgttctt aggcttcaga tgtggaaggc cggccacgca 240
gatgaatgtg gttcatgca cctattctgt aaggagctca atatgtagac cgtggattaa 300

ttaatccttt gggggctagc tacatggtgt ggttgcggtt gcggcagtgt aaatttgggg 360
 tgttcataat ttttntttt tttgactgtc aacgggggaa aagctcccca cctggatttt 420
 c 421

<210> 1585
 <211> 329
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-011-Q1-E1-G2

<400> 1585

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 ctcaacgacg acgcagtagt acatatggag aaagcggccg gcgtgagccc ggccaagctg 120
 gccctggccg ccgccgccgt gctgctgtgc ctgctgctgc tgctggccgc cgggccccaa 180
 ggggtctccg gcgccgacgg gaggaggaag acggcatccc cctacgataa gttgatcagc 240
 tgcanggtgc tgggcaactg cgacaagaac aaaggcccgg aggccacccg ccccggaag 300
 ccggtcaaca ggtacacccg cggtgcag 329

<210> 1586
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-G3

<400> 1586

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 attgaaagga cggccagttc tgggccgtat ataccaaggg aaggagccac cacaatttgt 120
 tgctcttttc cagcccatgg ttatcttgaa ggggtggaatc ggatctggat acaagaagct 180
 catagaagaa aaaggtgcta tgggtgagac ttatactact gaaggcatag ctctaattcg 240
 agtatctgag acatctatct acaacaacaa gactcttcaa gtagatgcgg tagcaacgtc 300
 ttttaagctca acggagtctt tcgtactgca atctggaaat gctatgttta catggtttgg 360
 caattctagc acatatgagc aacagcagtg ggcagcaaaa gttgctgaat ttttgaagcc 420
 tggcggtgca gtgaagcact gc 442

<210> 1587
 <211> 431
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-G4

 <400> 1587

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 ccactacgag aatatcaaga tggaggactc agccaacccc atcttcatcg acatgaagta 120
 ctgccccaac aagttgtgta ctgccaaagg cgcttccaag gtcaccgtca aggatgtcac 180
 cttcaagaac atcacgggca cctcctccac cccggaggcc gttagcctgc tctgcactgc 240
 caaggtccca tgcaccggcg tcaccatgga tgacgtcaac gtcgagtata gcggcaccaa 300
 caacaagacc atggctatat gcacgaacgc caagggcagc accaaggggt gcctcaagga 360
 gcttgcattgc ttctagaccc tccatcgact gacctatctc tctagttata atttttctct 420
 cgtccttgca t 431

<210> 1588
 <211> 197
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-E11

 <400> 1588

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 atgacgacat gttcctcaac ggctccttca ttaatcagtc cagatgcggg gaagaggggg 120
 tctaggacat gttcgacctc atctatacca ggggttgta ttacgccgta gtcgatcacc 180
 atctattctg gtgcgct 197

<210> 1589
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-E2

 <400> 1589

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ctgcaattgg ggggaggctc ctctccgccg ttggaaccgc tgcggcgctc cagcctgtgc 120
gactttcctg ctggttcctc atccctcagg gagagatttt gcattctttg gcattactgt 180
ttgatggcag acagtagtgc tccttctctg tggaggcatt ggggcaaaag gcagttgaac 240
tgaacgggca catcaatagt ctctggcctc caagggaaat tgggaaattc agattgaacg 300
tggctgcac atttttcctt tcattggtct tttcagcaac agcgatccat tctcgtaggg 360
gggagagaga gagagagaga gggagagaaa tcaaagagga gagtgatcat ggagcatgtg 420
atcggaggga aatataagct tggg 444

<210> 1590
<211> 449
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-011-Q1-E1-E4

<400> 1590

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caagctatca tctgcgtttt ctggtactca ggataagtgt gcagcttgcc agaaaacagt 120
gtacccgctg gagaagttaa ctctggaagg cgagtcctac cacaagagct gcttcaagtg 180
ctcgcacggg ggctgcatcc tcaccacctc ctctacgcc gcgctcaacg gcgttctgta 240
ctgcaagatc cacttcgcgc agctgttcat ggagaagggg agctacagcc acatgatgaa 300
gaagagcccc tcccaggata cgctgccgga catggcagcc gacgagcaac cgccggaacc 360
ggcgccaccg caagacgggg aaggagagga caactangan gaanggaccg ccaccaatat 420
atatcacaca cacacacac cactcacac 449

<210> 1591
<211> 445
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-E6

<400> 1591

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 gccgcccgcg cattcagga tggagatgaa gaagatcgcc tgcgcccgtcc tcgtcgccgc 180
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 ctccgcccgtc gcgcccgcg tcggcgccgc cctccggggcc gccgtcgccct ccttcttctgc 300
 ctactacatt cagtgcgccc gccggggcgc ccggaggccg aggaagagac gaaggggaga 360
 gagagtgaca tggctgcgcg cattccgatg cgtgggcatg ttttttgatt cgacacacct 420
 tttgtcctct ttttctttgt tccct 445

<210> 1592
 <211> 435
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-011-Q1-E1-E8
 <400> 1592

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 aatctgctag ttgatgttca ggggtgtagtc aaattggctg actttggaat ggcaaagcat 180
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 atggttcaag ctacactaat gaaagatgta ggctatgatc tcgctgttga catatggagt 300
 cttggctgca ccatcataga gatgttcgat ggaaagcctc cttggagtga tcttgaaggg 360
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 gaaggcaaag aattt 435

<210> 1593
 <211> 450
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-011-Q1-E1-D8
 <400> 1593

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cccacgctg gccgcacccg caatggggtg cgcggcgtcg gccgccaacg gggccggggcc 120
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 tctgccgccg ccgccgccgc cgccgcagga ggcggcggag tcgtcgtccg ggggcaggag 240
 gcgagggcgc aaggtgggcgc cggagcccaa ggagccggcg gaggagggga ccgccgcgct 300
 gccgccgatg cccggctcgc ccagcttcag gtactactgc cagaagaaga cggcggccgt 360
 cgacaggatc gtggccgacg ccgacgccgc cgacgccgat gactccgtca gggtcagagc 420
 gacggcgcggt cagctgagca acaggtgcga 450

<210> 1594
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-C2

<400> 1594

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 tgggcgcctc cggcaatggc aagacagaca gcacgaaggc tgtgcaggag gcatgggcat 180
 cggcgtgctg cggcactggg aagcagacaa tcctcatacc caagggtgac ttccttgctg 240
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 tgctggcgac cacggaccta agccagtaca aggaccatgg taattggatc gagattctac 360
 gcgtggataa cctgggtcat accggcaagg gaaaccttga cgggcaaggc ccagccgtgt 420
 ggagcaagaa ctccctgcac aaga 444

<210> 1595
 <211> 421
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-C4

<400> 1595

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ccacgtcaac cacggcaagt ttaaggcgga gccgtggacg gacgggcacg cgacgtacta 180
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 caccgggtgc ggcgcgtgct aagagctcaa gggccccaag ggcaccgtgg tggtgacggc 360
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 a 421

<210> 1596
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-C5

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 ctgcactgcc atccctagcg taacactaag cctagaggag aaagaaaata tcaatgggga 180
 tgttcccacg atcacctcgg ccgcaagcaa cgatgaggat gcgttggtca gtgtcggaga 240
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 tagcccttcc actcgcaaga agcgcggggc gttcagcctc ttcagggcga tgttcctgtc 360
 cttcggccgg agcgacgaca gcatgaagat tacagacgac gacaccacga tccccaag 418

<210> 1597
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-C7

<400> 1597
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 tgcggtgca gcggcaggcg tgctgcgagc cgtcgggtggc gccgtcgcg gcggtgttcg 180
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ccggcgtgcc ggtgttcgtc atgatgccgc tggacaccgt caaggagtgc ggcaccgcgc 300
 tgcaccgccg caaggcgggtg caggccagcc tctccgcgt caagagcgcg ggcgtcgagg 360
 gcgtcatggt ggacgtgtgg tggggcatcg ccgagcgca cggcccgggc cggtaaac 420
 tcgcgggcta 430

<210> 1598
 <211> 133
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-D6

<400> 1598

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 tcacaatc aacatcatta ctgtctttac tatcttcacg gcttacgggg ttggtcatct 120
 attctctcag tcg 133

<210> 1599
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A6

<400> 1599

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 gtgcactacc ccgctgcgga tcagcgtctg cagacgttcc aaatttttca ccctggtatt 180
 taccaccaac attgccacca tctccgaagt ggagatcaag gagcacggtg gcgatgactt 240
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 caagtacccc ctctgcatcc gctttgccat caagtctggc ggctaccgca tcgccgatga 360
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<210> 1600
 <211> 420
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A7

<400> 1600

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acccaaacaa caggatcacg atcgagaagc tggtcgagca cccctgggtc aagaaggggt 180
acaggccggc cgctcatgctg gcacagccgc acggctccag cagcctcaag gatgtccagg 240
tcgccttcag caacgccgac cacaaggaca gcagcagcaa ggtggaacag ccggcggaca 300
gtccttgaa gccggcgagc ctgaacgcgt tcgacatcat ctcccactcc agaggggttcg 360
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<210> 1601

<211> 187

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A9

<400> 1601

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cggggtcctc gtcgtcggcg cggtcattgt gcgggatgta ggcgagacct ttcattgactc 120
gtgtatcaag acccagttcc ccactatctg cgccacagc ctgcgagcta atctgtacag 180
ccacaat 187

<210> 1602

<211> 287

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B1

<400> 1602

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ggcggacgcg tgggggcttg cgctcaagtt cgcagtgttc gactaggaga tcctgaactc 120
ccctgaccgt gcgtgcaacc ttgcaaagca ggcctttgat gaggcaatct ccgaactaga 180
cagcctggga gaggagtcct acaaggacag cactctgatc atgcagctcc tgcgtgacaa 240

cttgacccta tggacttccg acaccaacga ggacgccgga gatgaga

287

<210> 1603

<211> 190

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B3

<400> 1603

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tccggagcat ccggttcacc tgcggcaact catcgtgcgg cttctctagg gcccatgacc 120

gtcgtcgaaa cttgtaatca cacgttaagc cccttggatg caatgggtatt gctcgtctgca 180

gcatccatca 190

<210> 1604

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-B5

<400> 1604

ctcnccgtcc ttcggtaggt gcattgcttc ggtggtccac catggcgcag cgagcgggtg 60

ccacgatgac gactaataag cccctctctc tctcgcctt ggcgtccgcg ctccttggtg 120

cggcgccggc cgccgcgaac ggcggcgccg gggcggttcag caactgggtg gcgatgaacc 180

agcagagcta cgcgctgtac ggcgagaagt ccgtcgggga cgggggcaag gagcccctgg 240

acaagaagct gtcggaggcg gagaagaaga aggtcacgta cgtggtggac cccagcggca 300

agggcgacta caccaacatc accgcggcgc tggaggatat cccggtgagc aacaccaagc 360

gcgatgatcct ggatctcaag cccggcgctc agttccgcga gaagctgttc ctgaacatca 420

gca 423

<210> 1605

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-B7

<400> 1605

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caacattttg ttcactagtg tggtagcttt gttgattgga gtgcgcaatg ggaggctgtg 120
cgggaaaggt acgtcgtgat gacgaagaaa agcttgattt taaagggtgga aatgttcata 180
ttataacaag caatgagggc tgggaccaga agattgcaga agcaaacaga gatgggaaaa 240
ctgttggtgc aaatttcagc gcttcctggg gtgggccatg cctgtgcatt gctcctgtct 300
atgctgaaat gtcaaagact tctctcaac tcatgttctt gacaatagac gttgatgacc 360
tgatggactt cagctcttca tgggacatcc gtgcaacccc gacattcttc ttcctcaag 419

<210> 1606

<211> 441

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-C1

<400> 1606

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caggagagacc tggttcgggtg gcatccacaa agcctgcagc agctgcatcc acacaaaaac 120
ctggcggtag cccaaagaaa ggtgaggtca aacctgctgt cgaccagtt caaactccag 180
ccacaagtgc agattcacca aaatccgagc ctagtgcccc accactttct gagaccgaag 240
aagtagacaa catggcaatc gatgaggtca gtggtgatgc tgcaganggc gcggaagagc 300
ttgaccctgc gctcgaggag acgccgatgg aggagacgat tcgtgtgacg cgcgccaagc 360
taaggaagcg caacgccacc gaggattctg ctgggaatta gctgcatgcc gttgttttcc 420
ctgcacattg tattgatctt t 441

<210> 1607

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A5

<400> 1607

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gaggaggaga ggaaagagac gaagggcgcg ccgggaagga ggaccaggag ggggaggcac 120
acaacgcttc ctcttgcaag cgggagtcct caagcctcct ccttggcctt ggctccaatt 180
cggggtgcc aacacgacc tctgccggcg gccggccacc ggcacccatg tcgcccttct 240
acctcgctcg cgggtgcttc aagctagtga gaaggattac ctcgagaca tcagtcgagc 300
tcaagattct ctctgaaaaa tggcggttc tctcgctgg cgtcattttt cagtacattc 360
atggtttggc cgctcatggg gttcattatt tgcaccggcc ggggcccaac ctt 413

<210> 1608
<211> 71
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H1

<400> 1608

ttccaaaacc ttttcccccc cttaaacttt tcccttttcc tggcaaggga aaaaaacttt 60
ccccggcaaa a 71

<210> 1609
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H12

<400> 1609

cgggccgacc caagcgtcca ctgaccacct cctcttatgc cgcgtcaac ggcgtcttgt 60
actgcaagat ccacttcgag cagctgttca tggagaaggg gagctacaac cacatgaaca 120
agaagagccc gtcccacgag gttctgccgg acgtggctga cgaggagcaa ccgccggtac 180
cagcgccacc gcaagatgag aaagaagagg acaactaaga tcggagcgac caacaaccac 240
ccatgcatat atatcacgca gactgaagtc tacacgtttg ccatatttct ttacgacgac 300
gacgcttctt tattccctcc tccctttttt ttctcttaa tctctctgtg agaccggttt 360
atcatcacgc tgcaatcaag tgtgccagat gccttcgtta cgtctgaggc tcacgacaat 420
ggaaaatctg acatggacct gtc 443

<210> 1610
 <211> 263
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H2

<400> 1610

tcactaacc cgccttcacg cctccctcac caaataaggt cccgcccttt tccgacattc 60
 acagggggga caggaaatca ggggccatgg cctcgattcc ggcgacgacc ttcgccgtca 120
 tcttatccgt cctctttctgt gccgcggctg gcaccgccgt cgacaacgac ctccccgact 180
 acgtcatcca gggccgcgtc tattgcgaca cctgccgcgc cgggttcgtg aacaatgtca 240
 ccgagttcat cgccgggcccc aag 263

<210> 1611
 <211> 291
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H4

<400> 1611

caacgggtcac gtgggctaga ccagaacatc catccgagct aagtaattag gtcgaaaatg 60
 acccgtgccca gcagcagtag cagcagccgg cgtgtgacgc tgggtactgct cgggtctccgc 120
 ctgctgcttc tggttgggtgt tgcgcaggcg gtagtggagt tgggtgcctgc tgatgataat 180
 atcgccgcgg ccgctgctgg cacggcggtg aacaatggcg agccgcctca gcattgcgcg 240
 accccgggtga ccgtgcagga ggcttgccgc ggcgcgtccg aaacgcaccc c 291

<210> 1612
 <211> 189
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-H8

<400> 1612

gacccaagcg tcaaggttac ttcactgctc atacaaaagc tccacagatt gtcgagactg 60
 atcatgctat ctcccgaatg ttttcatgtc gattccaatg tgggtattcag tacggtacat 120

aagctcatct tgtatgttgg tcaactgctt gcaccactta gtcgtggact ttaaattccga 180
attcggttc 189

<210> 1613
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A11

<400> 1613

gccaaacccac gcgtccaccc acgcgtccgc aagcacctcc tcttcccccg ccgggcaaca 60
actcagccgc cgcaaccgcc acatcagcca tggg'gcctg cgcaaccaag cccaagacgc 120
ttgaggggca ggccccagct gaggccgcgc tctccacacc caagggttgcg cccgaggcca 180
ctccaatctc cgttgagggtt gcggctgatg aacaggtagc tgagaagggtg gtggtggagg 240
agccggctgc ggcgccgcgc gttgagcatc agaaggctaa tgagggtgctc gctccagagg 300
cggccgtcgc cgagcccgac catcaagagg aggaagccgt ggagaagac 349

<210> 1614
<211> 190
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A2

<400> 1614

aatctgagaa ctttcttatt cattctacta gtgtggttgt tcgttttccg tttcgcttac 60
gctctttctc tgtcctctcc cggctctcct cccatggctt cttatcgggg tctaggggggt 120
cctttcttcc tagtgtccag ggttcttcgc gctcgctcct tctgatcgtc gtcctctttc 180
acgtctccat 190

<210> 1615
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A3

<400> 1615

cccaggccta cgaacgcgtc caccacgcgt ctgcgacatc cgattttctca ccctactcat 60
cagaacctag ctagctaggc gtagaacgaa tgacgaggca gggcggcagc aggtcgacga 120
cgacgctggt cgccgccgtg gccgtagttc tggccgtggc ggcggcgctg tccctggccg 180
gcgtggcgtc cgcgggagaag gcgggcgggg tctgtgtgac ggggcgcgtg tactgcgacc 240
cctgccgcgc cgggttcgag acgaacgtgt ccaggagcgt ggccggcgcg acggtggaag 300
tggtgtgccg gcacttccgc gcgtccaagg agacgctc 338

<210> 1616
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G9

<400> 1616
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cctggcatgg tgggtcaatct ggacgatctt cctttgactg cagctgagaa gaagctaata 120
catgcgtata acgagaagcc tgtcctttct ataccacagc atgagtttta cctgggtgat 180
aactacttcg agatcgacat tgacatgcac agatttagct acatctcaag gaaagggttt 240
gcaacatttt tggacaggct aaaagcatgt gttctagatg ttgggctaac tattcatgga 300
aataaagctg aagaactgcc ggaacaaatc ttatgctgtg ttaagttgaa tgggatagat 360
tacaccaaat accagcctct tttgactcaa gctgcctg 398

<210> 1617
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-A4

<400> 1617
ccggcactgg gaacgcggtg ggggaagaagg ttgacgccgt cgtccacact ctcagctaac 60
cagtgcctgg gccgcggttg gccacggtgg gcgacctgg tggttcaccg gtgcactgcg 120
aatctaggcg ggtcttctctg gggctcgatc tgggtctcat ggttggctaa tttctcaccg 180
gagcatttgg gggacggggc gtgcgcctcc aatttctcgc cgtcgacgtg ttctccgcgc 240

cgggactaca gcgtgccatg ggcgggactc ctgggagctt aatccgcgcg cgagggtcacg 300
 agtcacctga agatcatcct ggtacctgga atctcaagtc ccagggtcaag agcagggtacc 360
 acaggatgag gcgcgtggag gatgctgtga tgagttcgtg agtgggtctag gtcgtcgtct 420
 cccagtcaac tt 432

<210> 1618
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F11

<400> 1618

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 ataagaacaa agacgtacga taacctgctt attttgcgac ccatcccgtt cccacgcaaa 120
 ggcgccgagc gtgatctccg tccgtgccgc catggcctcg caccggggcgc tgctgcagca 180
 gtcctctgcc gccgcgctcg tcgctgcgct ggcctcagtc gcatccgccc acgacgccat 240
 cgccatgccc accagcctgg ctctcgtgga gcatagcccg cgggggtcct acgtctgcga 300
 caagccgggc tctgaataca aggccgtcga cgacgaagag gaccccgccc ctgtctgagc 360
 cgtatcgggt tcactaggat agatcccagg gacgacatcc ctcctttgac tgacgccgc 419

<210> 1619
 <211> 341
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F3

<400> 1619

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 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 120
 tgtttttttt tttttttttt tttttttttt tttttttttt ttttaaccccc aaaaaaaagc 180
 aattaagcca caaaaataaa tgggaacaa aaaaccata tataaaacac atgaaaaaaa 240
 tgatggaaac cgttttcaaa acccccacaa aatttgagtt taaaatccaa aaccgtgatt 300
 caaaaaaag ggccataaaa aaccggttca caatgaagga a 341

<210> 1620
 <211> 201
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-F6

 <400> 1620

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 gctgccgtcg cggtcctggc cgcgcggccg gcgtctgcag gcgggggagc cgcggcgggtg 120
 gcggagatct gcatgaagac tccgtcccc gacctgtgaa ccaggaccga ggggaagcat 180
 gccaacaggt acaaggtggt g 201

<210> 1621
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-G12

 <400> 1621

 gacgcaagcc tctactgcgc gccgcgtcat ctactcacc ccgccttcac gcctccctca 60
 ccaaataagg tcccgcctt ttccgacatt cacagggggg acaggaaatc agcggccatg 120
 gcctcgattc cggcgacgac ctctgccgtc atcttatccg tcctcttctg tgccgcgggt 180
 ggcaccgccg tcgacagcga cctccccgac tacgtcatct atcgccgcgt ctattgcgac 240
 acctgccgcg ccgggttcgt gaccagtgtc accgagtaca tcgcggggcg taaagtgcg 300
 ctggagtgca ggcacttctg caccggcaat ctcgagcgct ccaacgacgg ggtgaccgac 360
 gggatcggca cgtacacga 379

<210> 1622
 <211> 200
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-G6

 <400> 1622

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ctgtcttcat cgtaaggatg tagcagtgcc tccacagctt cggccacaac atcgatgcgc 120
 agcagcacac gaaaggctat gtacagcacg agacgggcta ggagcagctc atgatggacc 180
 attgggacca catggagggc 200

<210> 1623
 <211> 423
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-D9
 <400> 1623

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 acgatccctc gatgggcgcc atggctcggt cgtctccct cgtcgtggcg ccgcctctcc 120
 tcgtctctgt cctcgtctca gccgctgcc gtgcgcggac cgtgggggac accgtgcagg 180
 acgcgtgcag caatcaccca gttccccaag atgtgcgtgg acagcctcgc cgccaagccg 240
 gagaggcaca cggcgacgcc gcgcacgctg gcggcgctgt tcgtggcgat cccggccgag 300
 aagggatgcg ggatggggat cttcgtgcac cggcacgtgc agcgacaggg aggacagggg 360
 catagtcagg tgccacgaca gcggcgctcg acacgtggag gaggccgctc gccagggtgag 420
 cgg 423

<210> 1624
 <211> 373
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-E2
 <400> 1624

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 tctcggaat caaggctgca cctcatcag gaaccacagc agcagcaacc acatgtgcat 120
 gtggagctgc atcagcaacc acaagtgcag gtggagctgc agcagccgca accacatcaa 180
 caagcatcac ctgttatgcg cagaggagca tctattgctg ctcggcaagc agaaatggca 240
 cagcaatctc tggagactat acccgttcca tcttcacca agatcaagcg tcaaacaatca 300
 gggagacctg gttcgggtggc atccacaaag cctgcagcag ctgcatccac accaaaacct 360

ggcggtagcc caa

373

<210> 1625

<211> 251

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E6

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gcacagcaat ctctggagac tatacccggt ccatcttcac ccaagattaa gcgtcaaaca 120

tcagggagac ctggttcggt ggcattcaca aagcctgcag cagctgcac cacacaaaaa 180

cctggcggta ccccaaagaa aggtgaggtc aaacctgctg tcgaccagc tcaaactcaa 240

gccacaagtg c 251

<210> 1626

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B2

<400> 1626

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ggacaattgc agggcgtgag acaagaccgt ccacttcac gacctcctca cggctgacag 120

tgccatctac cacaagacat gcttcatgtg cagccactgc acatgggtcc tcgcatgtg 180

cagctactcc tccatggagc cgtgtgcctg tactgcatga gccacatcga gcagctcttc 240

aaggagatcg ggagcttctc acatgaactt cagccacgt ggcacgtcat cagacaatgg 300

tgaactgaca agggcgtcaa gcaagctgtc gtctgcattt tctggtagcc aggataagtg 360

cgcagcatgc cagaaaacag tgtaccgc 389

<210> 1627

<211> 267

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B4

<400> 1627

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gcagccgggg tgtgacgctg gtactgctcg gtctccgcct gcggcttctg gttggtgttg 120

cgcaggcggt attggagttg gtgcctgctg atgatattat cgccgccgca gctgctggaa 180

ggcggtgga cgatggcgag cgcctcagc agtgcgcgac cccggtgaac gttgaggatg 240

cgtgccgcgg cgcgttcgag acgcacg 267

<210> 1628

<211> 72

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B5

<400> 1628

acacgcctct gcactgattc gtaatacaag atcgtctgtg aatgtgagaa ccatgtggtc 60

gtccactccg gc 72

<210> 1629

<211> 181

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C4

<400> 1629

aaaaatctgc cttcttcgga attgccctga accagatggg attggcatgc gttcaaagat 60

attcgataaa tgaagcagca gaactgtttg aggaagctag aacagttctg gaacaagaat 120

acgggcctta tcatccagat actttaggag tgtacagtaa tcttgctgga acttatgatg 180

c 181

<210> 1630

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H5

<400> 1630

gtcgaaggggc cgcgtcacga cgtcaaagtt cgaggccgcc tgcggcgggc ccgtagcgca 60
 tggctcttgc agctgcagct tctccaacg caaatatcat ggagcatcat ccatagcacc 120
 atctccttgg ccgtagcgcc cgtgatcgtc ctgatctgtg ccgtagcttc ccgaccgcag 180
 acacctcggc gccgtacatg acatgcctgc cgggcttgca gaactattcg tcaacgttgc 240
 ggggctgccc tgagcacaca agagctctct ctccgacggt aacgcactcg attatgtcac 300
 gcagccggag caggcagctg ggacatgcac gtctcctgca ggagccgcat tttcgcttgg 360
 cccgccgtat caccacatt gacctccgcc 390

<210> 1631
 <211> 295
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H7

<400> 1631

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 caacatcagg gagcacagat cctgtatcga cgtggccggc gtcaccgtgg cggctctgcgc 120
 cgctgttttc tgetgcatcg tctgcgtcac ggaggacgtc tccgtgctct ccacgtgtgc 180
 acgcgcacgc tgcgatgtgc tgcaaggccg cccgcttgcg cacagtccac aggcactctg 240
 cctcggtcgg tcacgggagg gggatatagt aactcgtcta ggaccacaca ggcgt 295

<210> 1632
 <211> 332
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H8

<400> 1632

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 ctctcggcgc gcgcgcggg gcaccggccg ccggcgggcg gcgccctgaa cccggacttc 120
 aatacccagt cgtgcccgcg cgcggagcgg atcattgcgg aggtgatgca gacgaagcag 180
 atggcgaacc cgacgacggc cgcgggcctg ctccgcgtct tcttcacga ctgcttcgtc 240
 agcgggtgcg acgcgtcggg gctgatcgcg tccaccagt tccagaagtc ggagcacgac 300

gcggagatca accactccct ccccggggac gc

332

<210> 1633

<211> 182

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A2

<400> 1633

taacctcgtc gcctcctcca ttgaccatca attaaccctc cccgatcgcc atatctatca 60

tgtgcagtca tgggtgtctg tgcacgatg cctactacgc ttgacgggat atcaccaact 120

gacgctacca tctccacacg taacgttggc cctaacacca tctagtatcc acattgaggt 180

tg 182

<210> 1634

<211> 138

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A4

<400> 1634

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catgggcacc atagccagga cctcgggtca caaaaagggtc ctccgattct caaaggccgt 120

tttgctcggc atcacgta 138

<210> 1635

<211> 63

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A7

<400> 1635

ccctcaagta ccccatcgag cacgggatcc tcagcaactg ggacgacatg gagaagatct 60

ggc 63

<210> 1636

<211> 441

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-A9

 <400> 1636

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 agcacgacgg cggcggaggc ggaggcatgt cgctggttcc catcgaccat ggatactgtc 120
 tgccggagag ctctgaggac tgcactttcg agtggctcta ctggcctcag tgccgggagc 180
 ccttcagcga cgagacggtg gagtacgtgc ggtccctgga cgcgaggagg gacgtgacta 240
 tgctgaggct ccacgggtgg gaggtgtcgc gcgagtgcgc gcgcacgctg cgcgctcgcca 300
 ccatgctgct gaagaagggg gtggagaggg gcctcaccgc cttccacatc gggagcatca 360
 tgtgcagaga gaccctgacc aaggagtccg ccatcgaaga gatcgctccgt gaggcggcgg 420
 aacggggagg aggatgag a 441

<210> 1637
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-G10

 <400> 1637

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 gatcagctcc accaaccaag atgaacttgg agcgttatgc caacagatgc actagaagac 120
 gttgtgctcc acgatgacga cactgcctgg ggtgactacg ccagagcaac tcttagatgc 180
 atccctgcgg attacagcgg tgaaggcagc gatggcggag atgaagctag acaatgcaat 240
 aaaatcaggc agtgctcagg gtaacccgat gatgtcgtcg ctaaagacat gcaaggagag 300
 ctacgcgtcg ctggtagact ccatcaatac cacgcggaac acgctcaaaa gcggcggcag 360
 caatgcagac ctcatgtcgg agctatccgc ggcggacacc ttcgccaccg actgcgg 417

<210> 1638
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-G11

<400> 1638

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gctggagccg agccgggagg ggggcccga cggcagcctg gtggactggg cgcgggccat 120
ccttatccgg cccaaaaagt tggagcggat cctggaccgg cggatgggag aggtctgctc 180
ggagatgggc ctgcagcgcg tggcccgcct cgcgtacgac tgcctcagcc agaaccctaa 240
gggccggccc tccatggcca gggcgctcac cagctcagag gcagtcctcg ccgcccgtgc 300
cggcgccgcc gacgccccgc cgcggtgaga ccggaggttg atgtangtag tanggtcggc 360
atacggatta attaggtgcg tacgggtata tgcttgggag gaggaggcat gtttaatt 418

<210> 1639

<211> 403

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-G12

<400> 1639

gaccgaccgg tccaattcat aaaattaata agcaagggtt agagaagagg caacatgggc 60
acaaagatga agaaggggat cctgaagccg ttccgctata tctcaaccat catggatggt 120
aaggaggctg aaatgcaaat tgggttcccg acggatgtaa aacacgtggc acatattggt 180
tgggatggtc ctggctccac gaacaacaac aacaataaca acagcaacaa caatagtggc 240
ggagcaccta gctggatgaa ggattaccac tcggcaccgc ttgactcgtc ctcttttagg 300
agtgagagtg ggggcacggc tgctgcaaat cnctgngctt ctcaagagat agtcatggat 360
ggagcaagcg tcggagaaac ctcttcaag gacacgaaaa gcg 403

<210> 1640

<211> 98

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G4

<400> 1640

gacccaaacg tccagccttg gtctcgtgcc cgaaggacgc ctgccttcgg ttcctcactg 60

gcatggatga attagtcgtt tcggcgacga tcaactgcc

98

<210> 1641

<211> 144

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G6

<400> 1641

cagccagcag gcagcttgct cgccgcgcc gtccttcttc ctgcctccg ttccgttccg 60

ttccgtcacg cccaccgccg ccgccgcatt cagggagggc aatgcagcag atcgctgcg 120

ccgtccacga caccgcctca gggg 144

<210> 1642

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-G8

<400> 1642

cacccctccc ctgcgtcacc ccaccatata cgccagccc aacgaaaatg tcgcgcgcca 60

cagctgcggt cctctttctac atcctcgccg tcgctgcct cagcgcggcc gaggcaccgg 120

cagagtcacc gaaggcaggc agtcttgcca aggcaccggc cgagtcaccg aaggcaggca 180

gtcctgcagc tcttgccaag gcaccgagc ctgctgccac gagaactgcc cccgctaagg 240

cacctcaagc cgctccacc cccgccgtg ccgctgcccc atcgctcgctg tcgtctaaga 300

agtctggtcc agctgccgag ccgaccaccg ccgctctac accgtcttct tccacggacg 360

aagagtttga gccttcgccg tcggcatcca acgccgaggt ggcgtcncct gccgctgatg 420

ggcctgctg 429

<210> 1643

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H10

<400> 1643

tctggctggt gtacctgatg ctacagagtag acgctggctg ctgctccgca aggaaactga 60
ctccccgcac cgccgttcat gctcctgtct ggctggctcg ctggccgcct caacgggaac 120
gctgccgtag aatgacgact ggggctggtg ttgttggtac agtatggtcc ttttttcttt 180
cttctttccc ctttcatcca ttaagctctg tgatgtagcc gcccgtagtg ttgattcatg 240
aaatcatgcy agagatTTTT tcttggaggt aattgcytgc ctgttacact gtcgaaccta 300
tttggaccaa agttgtacac cgcagtatga tgttacc 337

<210> 1644

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H11

<400> 1644

acggacccat ccacgcacg acctagcggc cgtcgcggtc atgcacacat tcaaagcagg 60
caagcaatct aggctcagca tgattcaca cgaatgcag gagacgcca ccatcagcat 120
cgacggccac gacatcatac tcttggacct ggagggtca tataacctgc acgacgtgta 180
ctactcgtg aacgtgcacg tctgccactg catcgccctc ctgtactacg acgactaccc 240
gcccggtac tacaacatgg tgtccaccac cctgttcac gacaacgcca agtccgcctc 300
cgccgtcatc cgctactcca gcgccagccg caccgcgccg gcgaccaaca tgaacaagcc 360
atcggacagg ctggccatcg ccatcaacca cacca 395

<210> 1645

<211> 234

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H12

<400> 1645

gcgagtcct gacatgggag gatcactagc ccgtcccacg aggttctgcc cgtcgtgggt 60
gcacaggcgc tgccgtcggg gtttagagtca ccgcatgttt acattcgtca tgacccttc 120
gttcagtacg cctctgtgcc atgcatgcac atagatcatg ctactgaag tctacacgtt 180

tgccatatct cgttacgtac actacgcttc tttatcccct cctccctttt tttt 234

<210> 1646
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F8

<400> 1646

gcgtccagcg gtagcaccgt tcgcgggcgc cgcacgcttg gacgttggtg agggtaggtc 60
catggaatcc gccgatgcac cggaggcggc ggccgatgct cccgctccta gccccgactc 120
cgctcatcc ccagactcgt catcggaggc gccctctagc agcagttcct ccgactagac 180
gcaaaaacct cttcattctc tggaataact aacagtatat acgttgccacc ctgatgatat 240
agaaacatgt acgtgcatca gtgtatggaa tgcgagtggc aaacacatgg aatgtgcttg 300
cctaattatt gtttatttct ttatttatta tatgtctctc tcgtttgttt tttatttttc 360
ttaatgcaag ttatataatt tgttataccc aata 394

<210> 1647
<211> 73
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E5

<400> 1647

accttgtcac cacacgcagg taccaacaag gcgacgatca tggcgaggct gtccttgga 60
cgggcggtgg ttc 73

<210> 1648
<211> 361
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E8

<400> 1648

gccccggccc aacggcccc gaaccaattg gccgttcgga accgggcggg gccccccggc 60
gcaacagcag cccgagtacc cggaacaagc ggacctggaa gacgtgctgc ggacggtggg 120

aacgttcccg cccatcgtct tcgcccgcga ggcgcgcacc ctcgaggagc gcctcgcgga 180
ggccgcccgtc ggccggggcct tctctctcca gggcggcgac tgcgccgaga gcttcaagga 240
gttcaacgcc aacaacatca gggacacctt ccgcgtcctc ctgcaaagtgt ccgttgtgtct 300
catgttcgga ggccagatgc ctgtcgtcaa ggtgggaaga atggcaagtc agtttgcgaa 360
g 361

<210> 1649
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F11

<400> 1649

cggacccttg ggcaacacac acatccgtga aagaaacaag cacatgaaaa caaatacatc 60
gctagctcgc caccaacaat ggccctcaagg tactctatcc tgcttgccac aacgacactg 120
gctatgttgt tcgcattcgg ttcgtgcacc accccactca ccttccaggt cggcaagggc 180
tccaagcctg gccacctggt tctcaccct aacattgccca ccatctctga cgtggagatc 240
aaggagcatg gcggcgacga tttctccttt aactcaagg agggcccagc tggcacttgg 300
acgctcgaca ccaaggcccc gctcaagtac cccctctgca tccgctttgc taccaagtct 360
ggcggctacc gtatcgccga tgatgtcatc cccgccgatt tc 402

<210> 1650
<211> 239
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F12

<400> 1650

caccctccct ccctcacaca cttattatgg aaagggtccc cctttttcct ccgacatcca 60
caggggggag gggaaaacac gtgcattcac ccggcggcaa taatggcctc ggttccggct 120
ccggcgacga cgaccgccgc cgtaatccta tgcctatgcg tcgtcctctc ctgtgccgcg 180
gctgacgacc ccaacctccc cgactacgtc atccagggcc gcgtgtactg cgacacctg 239

<210> 1651

<211> 254
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-D2

 <400> 1651

 acccaaacgt ccagcctgcc ggcagcgtg ccagcaggct ccaaacgcgc acaccacatc 60
 aaactgcaag aggtcgagca caccctaac gccggccaac tgacgacctt caaacgcgcc 120
 aaccctacag acatgtgtag atgattgga cgatcgtcac ctccactcta ccccatgtcc 180
 tcatctaggc tacagcagtg tcggccacca ctgacgacgc agccgacggc gatctaacad 240
 cgtccgagtc atct 254

<210> 1652
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-E11

 <400> 1652

 gccacgcgtc cgcactgaag cacagcgagc gagctgtccg gccaaaaccc tcagggccgc 60
 ctccacaatg ccgcgccatc tcgcgtgct cctgcccctg ctactgctgg cctcgccggc 120
 ggccacgcgc ctggcgtccg ccgcctgcgc gggcgagaag ttcccggcgg ggcgtgcgta 180
 cgcgtcgtgc gaggacctgc cgaagctggg cgcgtcgtg cactggacgt acgacgcgtc 240
 caagagctcc ctgtcgggtg cgttcgtggc ggcgcccgc gcggcgggcg gatgggtggc 300
 gtggggcctg aaccgcacgg gcgacggcat ggccggcgc caggcgctgg tggcgctggc 360
 gggggccggg gccgcagcgc ccgcgtgcg gacctacaac attcacgggt 410

<210> 1653
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-B1

 <400> 1653

 gggtcgagga cgcgtcagct tgcaatcaca acgaacaaaa gctctcgatc tcaccgacac 60

cgaggaagaa gagatcaatg gcggtccgagc agggagtcgt gatcgcggtgc cacagcaagg 120
ctgagttcga cgcccacatg accaaggccc aggaagccgg caagctgggtg gtcacgcact 180
tactgcccgc ctgggtgcggt ccatgccgcg ccatcgcccc actgttcgtc gaacacgcca 240
agaagttcac tcaggtcgtc ttcttgaagg tggacgtgga cgaagtgaag gaagtcaccg 300
cggcctacga gggtcgaggcg atgccgacct tccacttcgt caagaacggc aagacggtcg 360
cgaccatcgt ggggtgccaag aaggaccagc tcttggccct gatcgaaaag catgccgcg 419

<210> 1654
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B12

<400> 1654

tactaatcaa attcttgttg ggatatattc ctccaattcc cctcctcctc ccaacaaggc 60
aacaacaatc tgttccggcc gccaaacaaa acccaaaaaa aaaaacacac tgaacccaat 120
aatccgatcc cacagaaact tttctctcgg tccgttcgat cgatcgctgc cgtgtcgttt 180
gccagacacc atcagcacc cccaaaccatgg cctgcaacct ggctcagtgc gccaccgccc 240
ccgcggcgac cgtcgcgccc cgcacccctc gccctgctgc gtccgcgtcc gtctccttct 300
ccgcgaggaa gccggcgggc ggcagcctgc ggctgcagcg gcaggcggtgc tgcgagccgt 360
cgttggcgcc gtcgcgggcg gtgttcgcct gccgggcccgc ggcg 404

<210> 1655
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B6

<400> 1655

gcacgcctct acagtgcgt cgtgagcagt acaggggcat gatggacgcc gcgcgcgccc 60
gcgaggcccg cagcggatgt ggcgtcgagg agtacctgag tcgcggcctc cgagcgttcc 120
aggcggcgcg accggggcggc ggcaaggagc tggaggaggt cgaggacgcg ctgctcgcca 180
tgcacatcaa ccgggagagg gcggacacct ccgccgacga tctcggcgac ctcgacctcg 240

ccatcgaagg cgagtatcgc gacttccccg gcgagcacgt cacgatccct gccgggtact 300
cacgcgtcgt ggaacacctc gtcgcggcgc ttccgcggga taccgttcgc ctcgccacc 360
gcctccgccg cctcgactgg agcgagactc ccctgcgact tcacttcga 409

<210> 1656
<211> 211
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C10

<400> 1656

gtgggacgta ttagagcagg tgctgataaa tcaccggcat cgagatcagt cagatggacg 60
attaccttcg gctttacgtg catctgaact ctacttgat cgtgctccag catcaagcgc 120
atctaggact ataccgtatg actacgtcgg ttggagtctc acatgggacc ttcactaggt 180
tcgtcatcga ttcaggttct gacatgcata t 211

<210> 1657
<211> 259
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-008-Q1-E1-H4

<400> 1657

actgcaaagg ggtcctctcc atgtgcaact actcctccat gacggtgtgc tgtactgcaa 60
gacccacttc gagcagctct tcaanggaga cggggagctt ctccaaaaac tcacgccagg 120
tggcaagtca tcagacaagg gtgaactgac atggggccca ggcaagctgt cgtctgcatt 180
ttctggtacc caggataagt gcgcagcatg ccagaaaaca gtgtaccgcg tggagaagtt 240
aactctggaa ggcgagtc 259

<210> 1658
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-H6

<400> 1658

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 tggaggactc agccaacccc atcttcacg acatgaagta ctgccccaac aagttgtgta 120
 ctgccaacgg cgctccaag gtcaccgtca aggatgtcac cttcaagaac atcaccggca 180
 cctcctccac cccggaggcc gttagcctgc tctgcactgc caagggtcca tgcaccggcg 240
 tcaccatgga tgacgtcaac gtcgagtata gcggcaccaa caacaagacc atggctatat 300
 gcacgaacgc caagggcagc accaaggggt gcctcaagga gcttgcacgc ttctagaccc 360
 tccgtcgact gacccatctc tctagttata atttttctct cgtccttgca ttgccatta 420
 gatgct 426

<210> 1659
 <211> 161
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-008-Q1-E1-H7
 <400> 1659

gcgtccaggt gtctttggag tctgcggagg tgctcactct gctggggata cataactaga 60
 ctatcaacca tgcagaatca cgtgatctga gctagcaggg cactggctct gctcgcgcga 120
 gtttgagtag cgctcgtggc acctgcagtg ccacctcaag t 161

<210> 1660
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-H8
 <400> 1660

cgcgccagc ggcagccagc aggggaggag gacacgaatc gtagtcggcc tcccgcccgc 60
 cccggcaatt gttgttgctg ctgcgcgcac ggcngttctg gattgcggtc tgccccaccc 120
 acgaacaatc catggctcca tctccgcctc ggctgtgtgc gtcctcctc gccacgggtgc 180
 ttctgtggc ggcgccggg tccacccccg gcgccacggc tgctggcatc ttccaggtgc 240
 gccgcaagtt caccgccggg gtgggagggg gtgctggcgc caacatcagc gcccttcgcy 300

cccacgatgg caccgcgtcac ggccgcctcc tcgcagccgc cgacctccct cttggcgggc 360
tcggcctccc cactgacact ggctcttatt acacggagat caagctcggg acgccacca 420
agcactacta cg 432

<210> 1661
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A11

<400> 1661

atccacccgg cttggtaacg ccacgcatga aaggtaaggg aaaccttgac cggcaagggc 60
cagctgtgtg gagcaagaac tcctgcacca aaaaatatga ctgcgagata tttctcaaat 120
cgctggtgat agacatcttg aacaaagggg aggtgtcctg ggtcatactg cgcaacacca 180
caatcttcca caagatcatg ttatagtga acgacgatat gatgatcgac gtgatcgta 240
tgggcggccc ggacaacccc aacaccgatg gcatccacat aggcgactca tcagggatga 300
ttatcatcaa caccatcatt ggtgtcgtcg acgactgcat catcatcagc gccgggagga 360
cca 363

<210> 1662
<211> 291
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A12

<400> 1662

ggctccacgg gggtgacagt aagccgggac atggcgcgcg gtggcctcgc ccgcctgctc 60
gccaggctca tcatcttcc cctgctcgcc gccggacctt ccctcgccga gtcagaggcg 120
gaactcgctc ggggcgcgtc agaagcgtga cgggacgctc agcagcattt cctgccgcgc 180
ccgctcatca tcgagctccc gtcggcgcgg gccggggccg agctcgacgc ctaagccgac 240
ggcgacgccg tggtaacagt cgacgtacgc tgcgccagct ggcagctcgc g 291

<210> 1663
<211> 275
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A3

<400> 1663

ctgcctcgct cttccccctc ctatttaccg cccgcgtcga ccgcccgcgc acgccttccc 60

acccccgcgc ctgcctctgc ctgcctgctc cccgacgccg gggggcccca caacgatccg 120

gccccggccc cgcgcgggtca cagcaagccg ggacatggcg cgcgggtgta tcgccccgct 180

actcgccacg ctctctctct tctctctgct cgccacgccc ctgcgagacg gcgcttccga 240

tgcagaggct gccggcctcg cgcattggcg gtccg 275

<210> 1664

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A6

<400> 1664

gcgtccagag tgactagcat ccatggatgt gacgacctct cctcctcgct gtctctctgt 60

atctgcacct gcaagcatgg caattacttc tgacaagatc tgcgccatgg cggcaaccac 120

cacgggggatg cagatgatgc agggggcggc cttgctcctg tgccctggctc tgttggcagc 180

atctacgcgg gtgcgcgtgg gcaactgccg cgaccactgc atggctgcat gcaacggctg 240

gaccatcgtc tgccagctct cctgtaccag cgcattgctac ggagaactcg ggatcagatg 300

cttacgtacg tcggctgtat tagctatagc ataatgcgcc tgcattcagca ccacatgcaa 360

tacactagcg aagcgccg 378

<210> 1665

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G12

<400> 1665

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agctcggcct cggcgtcgtg gaggactggc gcccttggtc catcgacgcc aaggaccagg 120

aggctgcccgg gtacgtgatc gagtacaagg gcgtggtgtt cgcgacgggtg cgcggggtccg 180
ggcacatggt accgatcgac cagccggggcc gcggcttcgc tctcttctcg tccttcatca 240
aggggcagcc gtcctccaag gccgcgccga tggtcgacgg atgaagagcc acggtcggtg 300
ggattccgga gtttcaccct tgtctcgtea agtcaccatg catattgtct ccatttccac 360
gttaactacc agaccgtgta catactgact aaacgctcga tctgtgacct caactgttgt 420
atgaatgttt cgctgcagt 439

<210> 1666
<211> 291
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-008-Q1-E1-G3

<400> 1666
ctacgcggag ctcatggaga tggcgcgcaa agccgggctc aaggtccagg ccgtcatgtc 60
cttccaccag tgcggcgcca acgtcggcga ctccgtcagc atcncgctgc cgcggtgggc 120
cgcgaggag atggagaggg accaggacct ctgctacacc gaccagtggg gccgccgcaa 180
ctacgagtac gtctcgctcg gctgcgacgc catgcncgtc ctznaaggac gcacgcccgt 240
cgagtgtac accgacttca tgcgcgcgtt ccgcgaacac ttcgccgact a 291

<210> 1667
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G8

<400> 1667
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gccgtgctag cgggtggcgc cgatgtcgcc aacgccggcc acgccaagcc cctgacgcct 120
ggcgggcgtg tggtagacga caaccacggc aagttcacgg ccggggccgtg gaaacccgcc 180
cacgcgacct tctacggcgg gcgggacggg tccggcacca cggcggggcg gtgcgggtac 240
aaggacacgc gcacgcaggg gtacggcggtg cagacggtgg ccgtgagcac ggtgctgttc 300
ggtgacggca cggcctgcgg cgggtgtctac gaggtgcggt gcgtggacag ccctagcggg 360

tgcaagcccg acgcggcggc actggtggtg acggtgaccg acctgtgccc gccaaggac 420
cagtgggtgca agcca 435

<210> 1668
<211> 343
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-H1

<400> 1668

aatcatctca tggctgaagg agcttgggca aaaaacgccg tacaaatgga gggagctctt 60
cgcggtgaaa aaagagaaac agcacgaaat tgaggataag atgcttgaca aattcacaaa 120
taagtttcaa gcatagagag ctgaaaaacc actgcaagca aatcaaacta tgtacaaagg 180
tgcctccaag cagcaaaagg agtttctttg gaggaaagtg gacctagcac tgtatccagt 240
tccaactaca agagcactat actgaagaat gctacgatac atgttaacaa tcaatcaaca 300
ttgcagtctg ctatgcaaaa gaatactttt gcgacgtcat ctc 343

<210> 1669
<211> 416
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-008-Q1-E1-H10

<400> 1669

caactacacc agggccgacg acgggcagat gtacttcggc gctcccggag ccccctgcgt 60
ggccaagctc gtcaaggctg tcgcagcgcg gccgtactct gtgtccatca tggagatcag 120
cgagcccatt ttgccggccg cgttgccctc ccccgctcgcg gcgcccggcc gccgcggcaa 180
gggtggtaag cgcaagatca agccatcagc ggcaacccat gaggattcca acatgatccc 240
gcgcaagccc gtcgaagcag tgggtggtggg taagggttaag gtggccaagg atacctgtgc 300
cgagtcacct gtcceaagcc cgcggcccgct ctccgcccct tagttgcgtg ttgggcgccc 360
ctgcncgccc gccccggcc accatgcgtc gtgtctgcgc gcgcacgcac gcattg 416

<210> 1670

<211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-H12

 <400> 1670

 ccccggtg cgcgcggtc gtactcctct cgtcactcct ctgcgccgga gcgctcgggt 60
 tcttggccgg ctcccatgcc gccgcggtgg cgcccggtta cgtcgccgct tccgccgcca 120
 gcttcgtgcc gtcctcaacg tgcagctccc ccgaccgagt tccgccgag cggcggaacg 180
 gcacgtccgc cgtgctgcgg ctgacgcaca ggcacggggc gtgcgcccc tgcggggcgt 240
 cctcgctagc ggccccgtca gtcgctgaca ctctgcgcgc ggaccagcgc cgggcggagt 300
 acatactgag gagggtgtcg gggcgcgcg ctcagctgtg ggactccaag gcggcggcga 360
 cggtgccggc gagctggggg tacgacatcg gcacgtcaa cta 403

<210> 1671
 <211> 201
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-E3

 <400> 1671

 catccgtggt tgagccatac aacagtgtcc tgtccacca ctctctctc gagcacactg 60
 atgttgctgt cctgctcgac aatgaggcca tctatgacat ctgccgcgc tcccttgaca 120
 ttgagcggcc aacctacacc aacctcaaca ggcttgcttc ccacgtcatc tcatccctga 180
 cggttcact gaagttctat g 201

<210> 1672
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-D10

 <400> 1672

 gacccaagcg tccacagaga ctccatggac gatcaggaga acgagcacga caagcatgct 60
 gatgctggga ctgacgtcga cgaagaagag gatgacgaag atggccacaa gcgtgtcgct 120

gttcttggac tccacgtccg cctcaaggaa cagctcaagc ttgacaagga tgatgagagc 180
 ctgatgaggt ggaaggagca gctcctcggg caactcgaca ccgagcagct cggagagact 240
 gcggcgccgg atgtgaaggt gctcaacctg accatcctgt caccggggcg gccagatcta 300
 gtgccatcga tcccgttcga ggtctacgac aatggctatg cgtttacgct caatgatggc 360
 agcctctata gcttccgttt 380

<210> 1673

<211> 279

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-D3

<400> 1673

aactcatcgc ctctccatt tgacaacaat ttaacctccc cgagcgccac atctattagg 60
 tgcagccatg ggtgcctgtg caacgaatcc taagacgctt gatgggaaag cccacactga 120
 ggccaccatc tccacacca aagttgcacc tgagaccact accatccaca ttgacgttgc 180
 ggcaaaacat gcagtaattg agaacgtgga tgacgacaac gatgaggcac caacagtggc 240
 tgcgaaacaa gagccagcag ccaccattga acctcaacc 279

<210> 1674

<211> 330

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-D4

<400> 1674

gatgggattc ctcgccaata acatcatggt cgtggggcgcc gtccttgccg cgcttgtcgt 60
 ccgcggttca tgcgggcccc ccaaagtgca gcccgggatc agcatcacca ccaactacaa 120
 cggcaagtgg ctcaccgcca gcgccacatg gtactgtcaa cccaactgtg catgcgctcc 180
 tgacaactgc tgtgcgtgcg ggatcaacaa cgtgaatctg ccagcctaca ccatgatcat 240
 cgcattcggc aacttcccc aattcaatga cggcaatggc tgtgggtcat gctacgaagt 300
 gagatgcaag gaaaaacctg actgctcggg 330

<210> 1675

<211> 75
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-E1

 <400> 1675

 ttgcctctcg ctggcgctcg gtaactcgct gccttctcg gcttctcttg cgccaggatg 60
 ccttgggtccc gttgc 75

<210> 1676
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-E2

 <400> 1676

 cgtacattca cccggcgcca ataatggcct cggttccggc tccggcgacg acgaccgccg 60
 ccgtcatcct atgcctatgc gtcgtcctct cctgtgccgc ggctgacgac ccgaacctcc 120
 ccgactacgt cctccaaggc cgcgtgtact gcgacacctg ccgcgccggg ttcgtgacca 180
 acgtcaccca atacatcgcg ggcgcccaagg tgaggctgga gttgcagcac ttcgggcacg 240
 gcaagctcga gcgcgccatc gacggtgtca ccgacgcgac tgggcactac acgatggagc 300
 tcaatgacag ccactacgat gacatctgcc aggtggtgct ggttggccac ccgcgcaagg 360
 actgcgacga ggtccaggcg cttcaggacc gcgcggg 397

<210> 1677
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-B3

 <400> 1677

 tgctgcagct cgctcgctcg ggcttccgcg ccgtcgctcat cgacaagctc aacaagtcgt 60
 ccgagctggc cgctccgcgc gtcgccgcgc tcgcagggga ggactcacgc aacctctctt 120
 tccacaagat tgatgtccgt gacaagggat cactggaaat ggtttttgct tctacaacat 180
 ttgaagctgt cattcacttc gctggattga aagctgtggg tgaaagcata cagaagccat 240

tactttatta tgacgacaac gtcattggca cgataaatct tctagaagtt atgtctgttc 300
 acggttgcaa gaagttgggtg ttctcatcat cagctgcagt ttatggatca cccaaaaact 360
 caccctgcac ag 372

<210> 1678
 <211> 340
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C11

<400> 1678

gacaccactg acggcgggcgc gtgctggctac aaaggcgagc tggggaaaga ctacggcacc 60
 ctgacggcgg ccgtggggccc gtcgctgtac accaacggca ccgggtgcgg cgcgtgctat 120
 gatctcaagg gcccgaaggg caccgtgggtg gtgacggcca ccaacgaagc cccgccgccg 180
 gtgagcgggc aaaaggggcga gcacttcgac ctcaccatac cggcgcttcct caagatcgcc 240
 gaagagaacg ccggcatcgt gcccatcacc taccgcaacg tggcgctgcga aaggaaaggc 300
 ggcacccggt acacgatcac ggggaaacag cactacagcc 340

<210> 1679
 <211> 295
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C12

<400> 1679

atgcaagcct ctagcatgac gtcgaggtaa accagcagcc tccaataaaa gccagcacat 60
 ccaaataaaa ccgagagacc tcagccctca ggcaagccga ccgccgacgt accaccgcgc 120
 caacccgaga gaaagatgga gatgatcaag aggatcctca tcgccgcgct cctcgtagtc 180
 gccgtctcgg ccaccgcagt gctggcctcc accgaggccg ccgccgccgg cgccccagcc 240
 gcctccgagt cgtcggcgtc cgccgaagcc cccgctggcg ccgccggcgc cggcg 295

<210> 1680
 <211> 321
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-008-Q1-E1-C3

<400> 1680

gagcgatcga gagatanata tagatgatga aagtgggatc atcgtcagcc gttctcttcg 60
tgctagccct gacgctagtt tgtgccccgc tgatagcaga ggcaaagaag aagagagtcg 120
ccgccgccgc cgccgaggag aagaaggtgc aggacaactt ctgctcgacg ctgtgcgagg 180
gcangaaggg gatggacctg gtggtgtgca aggagtcctg cgacctctca cagcgctcca 240
acctggtgct gtacggccgg attcagtgcaggaggcaagtg caccgagcag aacggcatca 300
ccgcgccgca gatgaaagtg t 321

<210> 1681
<211> 230
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C4

<400> 1681

gtggaggtgg aggatacaca cggggggcgc cagcagcaac gccacgccga ggtcgtttcc 60
gagaagatta tactggagga cgccgccgca gttcttgctg ataccgctgg cccccccgc 120
accacggagg tggaggtgga gtccctcagg aaaggagcgg cgccggttcc agtactcatc 180
ctcgttgctg ccgcagtgga cgacgtggtg gccgacaacg ttcctggccg 230

<210> 1682
<211> 350
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-H9

<400> 1682

ggcgcgtgcg tgcgttcgtg catccaccgc cagcgttctg ggcaccatgt ctttcaccgg 60
cacgcacgcc acgtgtccgg cgtgcgactg gaccgtccac gtcacgccc tcttcacggc 120
cgtcggttgc atctaccata tcggatgctt caagtgcagc taatgcatcg gggtcctctc 180
gatgtgcagg tctcctcca tggacggtgt gctgtactgc acgacctagt tcgatcagct 240
cttcaaagag actgggacct tctcctacac cttcacgcca tctgccatgt caatagatga 300

cggtgaagtg acatggtgct caaccaatct gtcgtctgca ttttctggtt

350

<210> 1683

<211> 386

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-008-Q1-E1-A2

<400> 1683

ccacgcgtcc gacttcgtaa acaaccggga agtgtccggg gtcacgccgc tcaactccaa 60

gttctccac atgaacatgt tacggtgcaa ggacatgctg attaaggact ttaccgttac 120

ggcgcccggg gacagcccca acacggatgg catccacatt ggcgattcat ccgggatcac 180

catcaccaac accgtcattt gcggtccagca ctactgcac tccatcaggc ccgggaactc 240

caatgtgaac atcacccggcg tgacctgtgg ccctggccac tgtatcagca tcggcagcct 300

aaggcggtac acngacgaga aggacgtcac agacatcaac gtcaaggatt gcactcttaa 360

gaagactatg ttcggcggtcc gcatca 386

<210> 1684

<211> 301

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-A3

<400> 1684

aacatggcca agtccgcgc ccccggtcag gccaaagtgt agatggatca tcggagtatg 60

tggtcgggcc ttcgggggtgc cactgccact gtgccaggcc gcgccgtttc gctgtgcgcg 120

tgctcccctc atcatcttgt caccgaagtc attttttttc tcaactgtctc tttcgtttgt 180

gcaagaaggg acgagcaaag taccacccgc agcggattac taaattgtct aattacgcag 240

ttgtcgtgtc gagtttacta aagatgacca caggtaacct atgggtgtcc ccggtcggtc 300

a 301

<210> 1685

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-A4

<400> 1685

gtacgctcga gaatcccagg tccaaccaag cctccgagaa caataacca atagaaccat 60

ttaataaatt caagaatttg gataaattaa taaatccaaa caacggtggg ttcaaggtgg 120

accaaccaaa ggccaacggc aatccatcca aaaacccaac ggcaacgctg gtcaggcccc 180

tttggccctc caatgggggg cgatcacaat ctgcaactgc caaggccgcc ttcaatcggg 240

aaaaatcccg ttgccggaga agaagtcctt gttcctcaac gccgccagcg cgtcgccccg 300

ggcactacca gcagcaacaa ggcgggcgct cctcgcacga agcgcccgcc gtgagcgta 360

cgccgcggaac ggccacgaat aagcagcagc tgcacctgcc ggcgagcccc cgggcggtgcc 420

tctgctcacc aaccgtgcac gccggctcgt tccgg 455

<210> 1686

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-A5

<400> 1686

gagcgatctc ctctccctct ccctctccga tccattctcc agcgcgagca agttaacatg 60

tccgaccggg caaagatgtc gtggcaggcg tacgtggacg agcacctgat gtgcgagatc 120

gagggccacc acctcgcggc ggcgggccatc gtcggccacg acggtgccgc ctggggcgag 180

agcacggcgt tccccgagtt caagaccgag gacatggcca acatcatgaa ggacttcgac 240

gagccagggc acctcgcgcc gacaggcctg ttcctcggac ctaccaggta catggtcatc 300

caaggcgagc ctggtgccgt catccgtggc aagaacggat caggaggcat caccgtgaag 360

aagacagggc aggcactcgt ggttggcatc tacgacgagc cgatgacgcc tgg 413

<210> 1687

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-H4

<400> 1687

gggcaaccgc aatttctctc gtcccccccc tccgattctc ccctggccca aggaaaagga 60

aaaggaaaag gaaagaaaaa aaaccgcgcc gtccgcccga ggaaaaaagc aaagatccgg 120

aaccactgaa ccgcgctacg cgtggtcgtc gtccggagcc acgcgtggcg ccgcggcgat 180

gggcaactgc tgcgtgaccc ggccgttttc tggcaagcgg cgaagcggct cccgcgggtg 240

cgctggcggg aaccgttgcg ggcgctcgg cggcgccaac gtgcggtcct gctccacgtc 300

gtcctccatc tccgacggg cgcgcaccgc cgcga 335

<210> 1688

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-G11

<400> 1688

acccgcccgt ccaggcactt catatatttc ttgacagaat gtttcatcct gttgttgctg 60

tggtattgtc agtgacattt gttcttgctt ttggagaggt tataccgcaa gcaatctgta 120

ccagatatgg cctagcagtg ggtgctaact ttgtatggct cgtacgcatt ctcatgggtca 180

tttgctatcc aatttcttac cctattggga aggtcctgga ctgtgctctt gggcacaatg 240

agtctgcact ttttaggcga gctcagttga aagctctagt ttcaatccat ggcaaagagg 300

ctggcaaggg cggagagctt acccatgatg agactacaat cataagtgga gccttggacc 360

tgaccgaaaa gactgctgca gaagctatga cacctattga gtcaactttc tctactagatg 420

tggattctaa gttg 434

<210> 1689

<211> 425

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-007-Q1-E1-G12

<400> 1689

gacccacggc tccacaagtg tgatcatccg ttgatccatc ttgctaataa gcctgcgtgc 60

ccttcgttct tctcgtctc gatcccgacg acgctccgtt cggctccggc aaaccacatc 120

gaaggcgtgc ctcggcaagc gcgctctgcac gctgcccgtg ggcgccgacg tctacggcgg 420
cgacgccaac 430

<210> 1692
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-H2

<400> 1692

gatcttgcca tgttacaacc agcaagcaga aataaggtca accccgggca atatttcgac 60
aaggaaaagg aggagaaccc cgaggaggac gctgcgcccg tcgacgtctc cgcggaaggc 120
gtgtatgtgc ctctcaagaa ggagaaatcc ggcgaagacg ccacgccggt cgacgtctcc 180
aacaccaccg gcaaatacgt atctttcttct tccaaggcaa acggcaagcc cacgggaggt 240
cagcccgcag agagctccac caccgccacc gcggatgcgt acgctgtctc aaagcagaaa 300
gtcgtcagca gccagcccat ggccagcgcc gctcctgacg agcttccgct ggcggccaag 360
agctccaaca cctcggacgc gtacgcattc c 391

<210> 1693
<211> 145
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-E11

<400> 1693

cgcgctctcg cctcgcctc ctctcctc gtcgcctccg cggcctggg tttcgccgcg 60
gtggcccccg cggcctctcc gggcccttcg gcctctgtgc cgttgggggc gcccgctccg 120
tcgcctgcgt gtgtccgggc gggcc 145

<210> 1694
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-E2

<400> 1694

ggccccttgg ccggcccctt ggggcccgaag gcaacaagcc caactgggcc aaaaaactgg 60
caagccaagg gcttgaaccc ctccaacttc aaatcaagtt catgggtcgg gaacagacaa 120
gggcgtcggc agaaatgcat cggcaagtca atcggccttgg caaaggagct ggcgtgcatt 180
tgaaccaatt gactaacatg catatattat gtactaggtt tgtgcccgtg cgttgacacg 240
gaagttaaaa attagtataa aacaaagata cataacgata aatatcacta tgacattcaa 300
aatccatgtg gcaaaatatc actgtaacca tctatgattg tgcattgcga cgccacacaa 360
attattcgat aaaatattag caattgggaa aaa 393

<210> 1695
<211> 422
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-007-Q1-E1-E3
<400> 1695

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cgggacctgg aaattcccaa gcatcggcgc cttccagtgc aacgacaggt acatgcgtag 120
ccgcctgcaa gcggcagcgg aggcngccgg caagcctgag tggggccacg gtgggccgac 180
cgacgctggc ggctacaaca actggccgga ggacaccgtc ttcttccgcg gcgacaacgg 240
tgggtggagc accgagtacg ggcatttctt cctgtcgtgg tactcgcaag atgctgctgg 300
agcacggcga cctcatcctg tcggggcgca cgtccgtgtt cggcgccgcg cccgtggagg 360
tctccgtgaa ggtggccggc atccactggc actacggcag ccggtcccac gccccggagc 420
tc 422

<210> 1696
<211> 410
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-007-Q1-E1-E4
<400> 1696

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gctccgggac cgccagctgc agcggtctgga ggctgctgcc ggggtcgccc tcgaaggcga 120
ccagctgacc cctttcggtc ggagcctctt catcggcgca gctggcggcg gcgatcatgg 180
cgtggcgctg ggcgactact tcctcgcccc cagcctcgac gctctggtgc agcagctcgc 240
cgagaacgac gcgggacggc acgggacgcc gccggccaag aaggaggccg tggaggcaat 300
gccgaccgtg gaaatcgccg gtggcaatgg caacgatgac gacacggcca gctgccccgt 360
ctgcctggag gactacgcgg ccggcgagcg cgctcgggag attccctgca 410

<210> 1697
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-E10

<400> 1697

gtccaggcgt cggacgcggc aggccgcacg ccgtggtgat gccgtaccg ctgcagggcc 60
acgtgatccc ggcggtgcac ctggcgctgc ggctggccga gcgcgggttc gcggtcacct 120
tcatcaacac ggagtccgtg caccaccaga tcggcgccgg cggcgacatc ttccgccggcg 180
tgcgcgcgcg ggggggaggg acgacgacgg aggagctgga cgtgcggtac gagctggtga 240
gcgacggctt cccgctgggc ttcgaccggt cgctgaacca cgaccagttc atggagggcg 300
tcctgcacgt gccccgggcc cacgtcgagg acctcctccg ccgccgcgtt ctcgtggacc 360
cggccaccac gtgcctcgtc gtcgacaccg tcctcgtgtg gccggccacg 410

<210> 1698
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D11

<400> 1698

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gcaaccgcca catcagccat gggcgctcgc gcaaccaagc ccaagacgct tgagggggcag 120
gccccagctg aggcgcgcgt ctccacaccc aaggttgcg ccgaggccac tccaatctcc 180
gttgagggtg cggctgatga acaggtagct gagaaggtgg tgggtggagga gccggctcgc 240

gcggccgacg ttgagcatca gaaggctaata gaggtggtcg ctccagaggc ggccgtcgcc 300
gagcccgatc acaaggagga ggaagccgtg gagaagaccg tcgtcgagga ggagaagcca 360
gcggcagccg ccaatgcaga ggaaaaggtc gccaacgccg ccgagaacac gacga 415

<210> 1699
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D12

<400> 1699

gtccagctag ctaaccagcc agccagcagc cagcttgctc gccgcgcccg tccttcttcc 60
tcgcctccgt tccattccgt cccgccctcc accgccgccg ccgcattcag ggatggagat 120
gaagaagatc gcctgcgccc tctctgtcgc cgcctcgggc gccaccgtgg cgctcgccgc 180
ggaggctccg gctccggccc ccaccagcgg ctctccgcc gtcgcgcccg ccgtcgccgc 240
cgccctcggg gccgcgctc cctccttctt cgcctactac attcagttag ccggccgggg 300
cgcccgaggg ccgaggaaga gaccaacggg agagagagt acatggctgc gcgcattccg 360
atgcgtgggc atgttttttg attcgacaca cttttttgtc ccccttttct tt 412

<210> 1700
<211> 373
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-007-Q1-E1-D3

<400> 1700

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ttaacccttg actttccccg gggggccggg gaaaaaaaaag gcagaaggag gaggcacgga 120
gaggacgaga caggatgctc ggggttcaggc agatgccgtg gtcgtcgccg caggagcagg 180
agcaagcgcc gtcggagcag ctgtgcgagg ggggtgcngc cgtcgtggcg gcgcgccagg 240
ggatggagaa gccgctgacg gctgtggcgg aggcgttcga ggagctggcg cgcggcatgg 300
aggccgatgg cggggagctc cgcctcgtc cttcagcga ctctgcgt ctcgtctccg 360
tgctcttcag cag 373

<210> 1701
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D4

<400> 1701

gacgcgtccg accacgcgtc cgcgcgctcc ccgtccttcg gtaggtgcat tgcttcggtg 60
gtcaaccatg gcgcagcaac cgggtggccac gatgacaact aataagcccc tcctcctcct 120
cgccctggcg tccgcgtctc ttggtgcggc gccggccgcc gcgaacgcgc ccggcggggc 180
gttcagcaac tgggtggcga tgaaccagca gagctacgcy ctgtacgcgc agaagtccgt 240
cggggacggg ggcaaggagc ccctggacaa gaagctgtcg gaggcggaga agaagaaggt 300
cacgtacgtg gtggacceca gcggcaaggc cgactacacc aacatcaccg cggcgctgga 360
ggatatcccg gtgagcaaca ccaagcgcgt gatcctggat ctcaagcccc gcgctcagtt 420
ccgcgagaag ctgttctctga ac 442

<210> 1702
<211> 113
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B4

<400> 1702

tttctgcgat gtgatcgagc atttcttgca agttgcggga ataagccatt ccatgcactg 60
cgagtctggt ggttatgccc cgttctagca cgatggcaag tcttaacggt gct 113

<210> 1703
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B9

<400> 1703

gacccaggcg tccgaaagaa gtcacctaatt tctttcgatc gaattaggcg ccttcttcgt 60
cccacgctcc gtctttatctt gtaatctgaa gcttacagga acatttgagt ggatcatgga 120

cggattggta ggcctcttga aagtcggggt ggtgaggggc atcaaccttg cctaccgcga 180
 cgcaagaggc agcgatccgt atgtcgctct acgacttggc aagaagaaac ttaagacgag 240
 cgtgaagaag agatctgtga accccatctg gcacgaggag ctaactctga ccgtcacaga 300
 tcccagccta gctctgaagc tggaggtgtt cgacaaggac acgttcagca gggacgaccc 360
 gatgggggac gcggagatcg acgtggcgcc gctggtggag gcggcgaacg cgagcccgga 420
 agcgagcctg aggaacggcg 440

<210> 1704
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-C11

<400> 1704

ccactaccgc tccgaggcgt cgtgcccggc aacctccgcg gccgtggcgg cggcgagggc 60
 cgatgacgcc ctgcgccagc gccgcggggg gctcgtgcag gtccgggagc gggatcaggg 120
 cccgctgtcg acggggcacc agcacctgca ccaccatcac caccagctgc ggcggtcggc 180
 ggcgttccca ccccgccgcc cggggccggg gcgccgccct cctcagcgct gcgaaagcga 240
 cctcaacatc agggagcacc gctcctgcag cgaggtggcc ggcggcaccg cggcgggctg 300
 cgccgctgtg tgctgtgtgt tcccctgcgt catggtggag gtcgcggtgc tcgccacggt 360
 gcgcgcgccc gcggcgctgt gccgcaaagc cgcccgcgtg cgcaagggcc gcatgcgctc 420
 t 421

<210> 1705
 <211> 359
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-C3

<400> 1705

ctaacggccg cccggcaaac aaggcggttt ccacaaccaa ttgcaaagcc ccccggaac 60
 agaggcgggg ccagaagga ccgggggagc cgagggtcgg cgccccgcc aaagcccgtc 120
 agcattgacg tgccccgcat acccttcgac gagctcaaga ggatcaccaa caacttcagc 180

gaccgcgccc tcacgggga gggctcctac ggccgcgtct acaacgccac gctcagcgac 240
 ggccgcgccc cgcgcatcaa gaagctcgac aacagcgccct cgcagggacc cgacaccgac 300
 ttccgcgccc agatcgcgaa tgtccccaag ctgaagaacg agtatttcct ggagctcct 359

<210> 1706
 <211> 340
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-007-Q1-E1-C4
 <400> 1706

actaactttc tggcctgcaa ctttcgaagg cgttccaagc tccgggatgg cgcccgtgta 60
 catggccttc ctccgcttca tggggggacga gaacgaggcc aagaactaca gctacagcct 120
 cgaggtcggc gccaacggga ggaagatggt gtgggagggc accccaagga gcgtccgcca 180
 cagccaccgc aaggtgaggg acagccacga cggcctcatc atccagagga acatggcgct 240
 cttcttctcc ggcggggacc ggaaggagct caagctcagg atcaccggac ggatctggaa 300
 agagcagcag acaccagacg gcgcatgtac tccaaatctg 340

<210> 1707
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-007-Q1-E1-B10
 <400> 1707

gacccgccc tccgaccacg caaccggcct ggccctgggt ggccgcctcc gaccaccgta 60
 cgtcctccac cgcgtcgccg ccggccggcc tctgcccagc ccgggctgcc tgcgagggct 120
 tctgatggcc ctcgacgccc tcctttcctc ctagtgccca gctttattgc agatccagcc 180
 ctctgaccc cgtcttcttt cacctctcca acatgaaggt caacaccaag atcaagctgg 240
 agccggtcat ggccgctcg tgcctcctgc cgcggagcgc cagcgagcta cccgaccgc 300
 cgtcaccgtt cagctccaac acggcgcacc acccgtctc cgtgcccacc acacctaggt 360
 tgccttatac gtgctcgctg ttccggccaca tggatgaacc gcccaacgac acaacg 416

<210> 1708
 <211> 221
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-H3

 <400> 1708

 aataaatccc cggccccaaa gttaaggcgg agttcaagca atttcggaac gggaagctcc 60
 aaccttccaa ccaccggggtt gaccgccgga accgcaactt caacattcaa cccaaggcc 120
 agccacaagg aggaaaccgc caaggtggcc ttgcggaaaa cccccccaa ggactgcaac 180
 aagttcaagg cggacaggaa ccccccggc ttctggctca c 221

<210> 1709
 <211> 99
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-H4

 <400> 1709

 cttcaaccgg aaccaggac aattgcacgg cttccaacaa gacggtaac ttcacgacc 60
 tcctcacggc cgacggcgcc atctaccata agacatgct 99

<210> 1710
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-H6

 <400> 1710

 gtccagctgg agcgggaccc gaggaggagg ctcggttacg ccggcggcgc cgacgaggtc 60
 cgggcccacc cgttcttcgc cggcgtcgcg tgggacatgc tcacggaggt gtccaggccg 120
 ccttacatcc cgccgccggc cgacaggac ctcgcgacg tcgaagggtt cgacgtgagg 180
 ggccacttca aggaccttca ccagccgccg cctcccaagt ccggtcgga gtcgtcctcg 240
 tccgagttct cgacggaggt ctgactgtga gtcgggcta gcttcttttg cgctttggtc 300
 ctcggtagat tactatattt gtaccagagg gtcaagggtg tcggtactgt acatacatgg 360
 agacggggat ggtgctgtaa attcgacgta gagttggtgt ggttggtgcaa acattttggg 420

<210> 1711
 <211> 279
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-H8

 <400> 1711

 gagatagata cgcaggaccg cggcgacta tcgacgagg aggaaccaga taccggcg 60
 cggatgatcga tggctccgag cagctcatcg gcggcgacgt gcctgtgcct cgctctcgcc 120
 gcggccacgc tggcgctggt ccacggcgcg caaggaggag gaccatcggc atcgggcgcg 180
 gtcctggaca aggtcacgga cgagaccttc gtggacatcc agatcgactg caagcctgca 240
 tgccggatcg tgctgggact gtttggggac accgttcct 279

<210> 1712
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-007-Q1-E1-A10

 <400> 1712

 ctgagcctgg aggagatcga gtcgaagatc ctgaagtaat taaaaaccgt tcgtgggac 60
 acaagcccca tttggagata tgtaagtagc gatgccattt tcaaacggg cgctcgctca 120
 ctcgtaggat cggagccaaa gctttcagac atgggagtagc atatgcaaag ggcacgtctc 180
 ggtgtaaagc ttggacatct ttctcttata ttagcgtagt gaatatttcc gaacatactt 240
 ggtaaattac atctgcagtt gagtcataat cagcctctg tagactgtag tccactgtga 300
 gctactgtag tagtatgcat gtcactagta aaagctggta agctgtgcga tggactgatg 360
 gtgtagactt gtgcagttgt gctctcataa tgggtgggcat cagatcctgt aaa 413

<210> 1713
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-007-Q1-E1-A2

 <400> 1713

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 gggcaaaaaa ggattgggcc taaccgccca acctaggcaa tttggtggag aaccgaccgg 120
 gtccgggtac ttaaagtccct aaattttgac ggcactcccg catgctcaaa ataatactaa 180
 ctgacagcgt gagacagaac tggtgtctct gtcggacctg ctagcccaat gatgggtgct 240
 gtggagagga agactcatga caatgaacgc aagcaatggc cacgacagga ttgttttagaa 300
 ccatttctgt tacaacgttc atgatatctc tctcactcac tgctctcatc tcattaagta 360
 ctagctatcc aatgcaatgt ttccacactg ggcagtcata tcaccctgtt ttgg 414

<210> 1714
 <211> 379
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-007-Q1-E1-A3
 <400> 1714

tcgctccgac aattaataag gacaggtecc gcccttttcc tccgacatcc acaagggggg 60
 aggggaaaaac acgtacattc acccgggcggc aataatggcc tcggttcgag ctccggcgac 120
 gacgaccgcc gccgtcatcc tatgcctatg cgtegtctct tctgtgccc cggctgacga 180
 cccgaacctc cccgactacg tcatccaagg ccgctgttac tgcgacacct gccgcgccgg 240
 gttcgtgacc aacgtcaccg agtacatcgc gggcgccaag gtgaagctgg agtgcaagca 300
 cttcggcacc ggcaagctcc agcgcgccat cgacgggggc accgacgcga ccggcaccta 360
 cacgatcgag ctcaaggac 379

<210> 1715
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-007-Q1-E1-A5
 <400> 1715

gggccgaccc aaacgtccag ccgaaggcct cgtgccttct cttctctcct ggcattggagg 60
 aagtagctgt ttgcctatg atcggtgccc ccgtagtgct ggacaacaat ggcgctgacg 120
 cggctctctg cactgccatc cctagcgtaa caataagcct aaaagaaaaa gaaaatatca 180

atgggggatgt tcccacgatt acctccgccg caaacaacga agaagaagcg ttgttcaatg 240
 tccgagaatc caacaaggac gattgccatc gcttgacgat ggaatgctcc actcccgtct 300
 cctccagtag cccttccact cgcagagaag cgcggggcgt tcagcctctt caaggcgatg 360
 ttctgttct tcggccggag caacgacagc attaagaaga caaagcagca ca 412

<210> 1716
 <211> 294
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-007-Q1-E1-B1
 <400> 1716

gacgcatggg gtctacgaca acgacggcat cgccaagcac ggctaccagc tgcgcatctg 60
 gctcagcgcc gtgatcgca acatggagac gtgcatcgaa gggttccccg atgaagagtt 120
 caagaccaag gtgaacgagt cggtcaccga ggggaaagag ctcagcaaaa acaccctggc 180
 gctcatcgag aaggggtcgt cgcgcctctc cgcactcagg ggcgctctcaa aacggcgttt 240
 gctggaggac gagaagggat tgcggccgtg gccgcggcct cccaagccgg ggcg 294

<210> 1717
 <211> 66
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-006-Q1-E1-H12
 <400> 1717

gtccggaatc tgcgggaggt cctaacctgc acagatatag accacgagca agcttcctac 60
 acttcc 66

<210> 1718
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-006-Q1-E1-G3
 <400> 1718

ggtctaaatt acgggtcgac cacgcgtcga cgaatttgg gcgtgggcaa caaaggaaaa 60

ggctccgaca cctacgaacc tccaaagcaa tcctgggggg ccaaccggaa ggaaggcaac 120
 cacaagccga ttaaaggaac caacaacgtt caactcacia ccaaggaagg actaagacgt 180
 ctacgacgat gtcacccccg ccggctggaa gcccaacact gcctacaccg ccaaataaac 240
 taaccaata ataataagta tcaaattggca cacttgatag acctttatct tttatttttt 300
 atttaataaa aggatataag gagtgtgaca aacaacaaca cgaatattgt attgtctatg 360
 tatctcctat atatgcaatc ccaattttat catggccaca ttttaaaatg gaatatatga 420
 tatatatatg tac 433

<210> 1719
 <211> 316
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-006-Q1-E1-G4
 <400> 1719

cggccccgga acctggcaac gggccggctg gtggcgctca aaaagggtgcg gttcgacacc 60
 gtggaccccc agagcgtgcg gttcatggcg cgggagatcc tcatectccg ccgcctccgt 120
 ggccacccca acgttgctcg cctcgagggc atcatcacct cccgctcctc tccctccatc 180
 tacctcgtct tcgagtacct cgagcacgac ctggccggcc tcagctcctc ccccgacatc 240
 accttcaccg agccccagat caagtgttac atgcgacagc tgctggaagg gctggcgcac 300
 tgccatgcc cccggg 316

<210> 1720
 <211> 423
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-006-Q1-E1-H10
 <400> 1720

acccaagcgt caacagcgaa ccaagagagc aggggtgtggg cgaagagacc ccagccagtc 60
 gatcgttcaa gaaaaataacc agcttaccaa caacagcagc agcaagccca cccgttcgac 120
 gacatggccc gcctcggcgc cggcgccgtg ttggcgctcc tagtggcggt cgcggcggtg 180
 gccgcgttcc tcgcggtgcc ggctcggcg aagtccgggg agctgagcgc gatgggggtg 240

ctggcggcga agggcggcag cggcgcgggc ccgcagaagt gctcggggcg ggtgggag 300
tgcgacgtgg acgaggcgga ggagctcggt ctgagcggcg gcggcctcgg ctccgacgac 360
gcgggtgcggc ggacgctggc gcagcggaag ccgaccaacc ggtacatcag ctacgcggcg 420
ctg 423

<210> 1721
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E2

<400> 1721

aggccccgga aacaagcgca cgccgcatcc atccgcgccc tacgctcaa gatcgaggcc 60
gagctcgccc gcatctgcga cggcatcctc gcgctcctcg actccacact cgtcccatcc 120
gccggcgggc ccgagtccaa ggtcttctac ctcaagatga agggtgacta ccacaggtac 180
cttgctgagt tcaagtcagg tgcagagagg aaggatgctg cggagagcac catgaatgcc 240
tacaaagctg ctcaggatat tgctcttget gatctggctc caaccacccc catcaggctc 300
gggcttgctc tcaacttctc agtgttctac tacgagatcc tcaactcccc tgaccgtgct 360
tgcaaccttg caa 373

<210> 1722
<211> 309
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-006-Q1-E1-E3

<400> 1722

tgcaacttgc aaccaaggaa attaattaaa agaagatcgg ccccatggcg gcaacgacga 60
cggggatgca gatgatgcan gtgcagcaag cggcggcggt gctgctgtgc ttgggtgtgt 120
tggcggcgctc tacgcgggtc gcgctgggca actgccgca cgactgcatg gctgcatgca 180
acggctggac catcgtctgc cagctctcct gtgccagcgc atgctacgga gaagtcggga 240
tcacaacctt aagtacgtcn gctgtattag cganagcaga agcgctgca tcaagcacac 300

aagcaacac

309

<210> 1723

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E4

<400> 1723

aaccagcct tgcaccaaga cttcggccaa gccttcggca attccttggg tggcgggggca 60

acaacttccc tgggtggcccc ggcgggccgc aatgcaaccg gtggccgcca atttcgcaaa 120

ggccggcaac ccaaaccccc tgacccttgc cggcccttg gtacacaaca acaacggaaa 180

tttcacggcc gggccgtgga aacaagccac gccaccttct acggcgggcg ggacgggtcc 240

ggcaacacgg cgggcgcgtg cgggtacaag gacacgcgcg cgcaggggta cggcgtgcag 300

acggtggccg tgagcacggg gttgtttggc gacggcgcgg cctgcggcgg gtgctacgaa 360

gtgcggtgcg tggacagccc cagcgggtgc aagcccgacg cggcggcgct ggtggtgacg 420

gcgaacgacc tg 432

<210> 1724

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-F4

<400> 1724

taaaccctc aaattccaag aagcatgtta agacgccctc aatggccaca atggcaaggg 60

attaagttaa agtggaaaat tgccaaacaa aattttaaca agaaggggga aatatacaaa 120

agaaaatgcc aaagccatca atggacaaaa tttgaaccta atggccctcc gtcaacctca 180

aggaataatg caacctgaat tgaagccaga gaattttctc ttcacaacaa gagatgaaag 240

cgctcctatg aagttgattg acttttgtct gtcagatttt attacaccag atgaaaggct 300

caatgatatt gttggaactg cttaatatgt tgctccagag gttctacaca gatcatacag 360

tatggaagc 369

<210> 1725

<211> 230
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-C8

 <400> 1725

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 tgccctcttt cctctgacca tcgacagggg aggacgggaa cgtcacgtag acttcaccct 120
 gtagggaaat agtggcctct gattccggca tccggacgac tgattaccgc tcgtcggttaa 180
 tctctatgcc gaggtgggtcc tctatcacca tgtgtcgcgg actgaccact 230

<210> 1726
 <211> 257
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-D11

 <400> 1726

 tccggccggc gcatacagct tgtgcgtctg gctgtctccg gtcggtcggg cttgtcgtgc 60
 gtctctcagt ccgttgacgg tcatgccctc tagcggttgg tcggtgttcg ggagacctgc 120
 cagagggatc gggagacaca gatgtatacg ggtatggagt gcctgctggg gctgctcaag 180
 gtgcgggttg tgcgaggagt tgacctggca atctgcgacc cgctcaccca cagcagcgac 240
 ccctacgtcg tctctgc 257

<210> 1727
 <211> 367
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-006-Q1-E1-D2

 <400> 1727

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 acaaggacaa ctacttgacg gtggaaaaag cgcgctgcgt actgcagagc ctcgttacgg 120
 gggagttctc ctatgctacc tcacatgcc a gttcttgat gaaggctgat gtgaaccatg 180
 acggcaaaact gtcgctggag gagatgctag acgactacat atccttctac agcaccgtgt 240

atatggatga tcattacgcc agtgaaggtg aagtagatag tgattccccgc gacgagctat 300
gagcagttaa gccaggacag gacagcaagt cggaggttct ttactttcaa atacactang 360
attttgc 367

<210> 1728
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-D3

<400> 1728

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tggccttggg cgccttcctt gggcgctcg tcgccggcgg gtcttgcggg ccccaaagg 120
tgccacccgg ccacaacatc accaccagct acaacggcaa gtggctcacc gctaaggcca 180
cctggtacgg tcagcccaac ggtgccggcg ctctgacaa cggcgggtgcg tgcgggatca 240
agaacgtgaa cctgccaccc tacagcggca tgacggcgtg cggcaacgtc cccatcttca 300
aggacggcaa gggctgcggc tcatgctacg aagtgagatg caaggaaaaa cctgagtgtc 360
cgggcaatcc agtcacggtg tacatcactg acatgaacta cgagcctat 409

<210> 1729
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-D8

<400> 1729

cgcacaagtc caggacgtct cagcatcatc ttctgttgca tcagggaaca aattctgcaa 60
gggtggtgcc tgtgatttct ctgagtccag taactcctcg agagatgcca aggagagatc 120
cacgtccatg aggaagctta taatcgagc gatgctttgc atcatattca tgacggtgga 180
agtggtcggg ggcacaaag caaacagtct tgccatctta actgatgcgg cgcaccttct 240
ttctgatgtg gcagcatttg ccatatcgtt attctctctc tgggctgctg gatgggaagc 300
aacaccgcag cagtcatatg ggttcttccg gattgagatt cttggtgcct tgggtctccat 360
tcaggtcaga tggccacttg ctggcatact ggta 394

<210> 1730
 <211> 405
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-D9

 <400> 1730

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 acgcgccatg gctatggctc gctccgtcgc gcacctcttc tttcccatcc tccttatctc 120
 caccgcgccc gccgtgcggg ccatcaccga cgccgcgggc ggccccggat acctccagga 180
 ggcggtgaac aagacgctgt tccccaaagg gtgcatgcac gcgctcaagg acaaccaga 240
 gtgccaggcg gagacggcgg tcacgccgcg ccgggtggcc gagctgctcg tgtacgtgtc 300
 ggccgaggtg ggcattgaccg tggccgcgtt cgcgccacc gagctcaacg ccatcaagga 360
 cgacgacgtc ccgtacaagt gcatcgacac ctgctccgag gacat 405

<210> 1731
 <211> 381
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-B12

 <400> 1731

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 tgggccagtc gatagacatg gacatgcgtc acgtcgtcag atccgtcctc tgcaccgttt 120
 ccttggaat cgccgtgcta ggactctgtc acggttgatg tgcagtgtca tgcctgcggg 180
 gttttggcta tgtctagcgt gcggatgaat gcaagaagag ccttgacctg agcaatccac 240
 acattgagca cgtcagacgt cgctgtcagt attgaatttt acttggcctg ttgacacttt 300
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 tgttctttgt atatttgtgg t 381

<210> 1732
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B3

<400> 1732

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ctacaccgag gcttattgaa aacaaggtga ggcaatgctt cgatccaagg ctcggaaca 120
aataccctca aaaggctgta gccaaagtgg ctgctgtggc cgccctctgc gtgcaatagc 180
aagggtgaatt ccgtcccaac atgagcatcg tcgtcaaggc tctgaacccc ttgctgcaca 240
gccggtcttg caaccgccct actgcctcgt cggcctccca cgctgccgca gcagcatagc 300
gatccggact gtgatttccc atcgctgcga caactttggg ttcacgaaaa acgaccgtct 360
tgtggagcgt tgggtgttgct gtgtcgtgac tgccaacgcc ttggc 405

<210> 1733

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-C3

<400> 1733

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aagaagcgct ccgctacgca aagctcccgc tcaagttgca cggggatgcg gcggaaggac 120
cggccggacc tcgcaaccgt cgtactgccg gagctcaacc ggttaaggaa cctcggccac 180
gcgtacgagg cacgcatgag cgccgtcggg accaacagtg gaagtggcga aagtaatgac 240
caggtcagcg ggagctcgcc gacggcgggt ggttcattga gaacggcgga gagctagcgg 300
gtggtacggc gtggccatga gtcagttaga gagcgagctt gtgatgggga gagttccttt 360
gttggacgga gag 373

<210> 1734

<211> 108

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B1

<400> 1734

gcgtccaatc acaagtaggt gcaccacggc tcgttatcct cctcttgac tgcagtgcag 60

60 120 180 240 300 360 396

gtcgtagttg accagcacta gccactgcag acgatgtcgt ggcagacg 108

<210> 1735
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-A10

<400> 1735

gatgcaaaac tctaaatgag cgtcgtcata cgcctcctca tcccgggtccc gttcgaccag 60
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gtgctagccc gccagatcga cgccggcaag ggggtgggcc gccccgcggg cgtgctcatc 180
aacggcaagg gcggcaagga cctggacgcc gcgcctgcct tcaccttcga cgccggcaag 240
acgtaccgcc tccgcgtctg caacaccggg attaaagcgt cgctcaactt ccgcatccag 300
ggccactaca tgaagctggt cgaactggag ggctcccaa acctgcagaa cacgtacgac 360
tcctcgcagc tccacgtcgg ccaactgcctc tccgtg 396

<210> 1736
<211> 370
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-A11

<400> 1736

cgggccgacc cacagcgtcc agccgcatcc gcggcacgcc gcgccgcac cctgccccgc 60
gcaaaaccgg atccgccgcc gccatggcgg tggaccgcgt ggacggcgag gaggcgttcg 120
aggaggtgga cccgacgggg cggttcgggc ggtacgcgga cgtgctgggg ctccgggtccg 180
tcaagaaggt gtaccgcggg ttcgaccagg aggaggggat cgaggtggcg tggaaccgtg 240
tccggctgcg gtcgctggcc gaccgcgacc ccggcatggt ggagcgctc cacgccgagg 300
tgcgctcct ccgctcgctc agccacgacc acatcatcgg cttccacaag gtgtggctgg 360
accgcgacgc 370

<210> 1737
<211> 331

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-006-Q1-E1-A4

 <400> 1737

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 gattcaagct caaggacagc cacgaggagg acatctgcta ggtggacttg gtggaaagcc 120
 cgcgcaagga ctgcgaccag gtgcacgcag acagggaccg cgccggcgtc ctgctcacca 180
 tcaacgtccg catcagcgac aacctgcgcc ccgctaaacc gctcggctac ctcaaggact 240
 tgccgctgcn catctgcgcc tcgctgctca aacagttgga ctcgagcagc gacgacgatc 300
 agtaatagca catctacgac gactatcgat a 331

<210> 1738
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-A9

 <400> 1738

 gggccgaccc aaacgtccaa tcagcgtggt cagccgcctc ctcatcccg tcccgttcga 60
 ccagcccccg ccggagaacg accacgtggt gctcatcgga gactggtaca ccaaggacca 120
 cgaggtgcta gcccgcgaga tcgacgcgag caagggcggt ggccgccccg cgggctgtgt 180
 catcaacggc aagggcgagg aggacctgga ggccgcgcct gccttcacct tcgaggcccg 240
 caagacgtac cgcctccgag tctgcaaac cgggatcaag gcgtcgctca acttccgcat 300
 ccagggccac tacatgaagc tggtcgagct ggagggctcc cacacctgc agaacacgta 360
 cgactcgctc gacgtccacg tcggccactg cctctccgtg ctgctcgacg ccgaccagaa 420
 gcccggcgac 430

<210> 1739
 <211> 247
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-F9

<223> Clone ID: LIB148-005-Q1-E1-G12

<400> 1742

aaaaccacaa tccttcgtct caaccggtca catgatcatc acaaccgccc agcaataatg 60
gcgcatagca tgaggattgt ggcgctggcc ctgttggccc tgctggtggt ggcggcgggc 120
gcgcccgtgg ccaccgcgta cggctgctac gacgactgct acaagcgctg cgccaacggc 180
aagaaagacc ccgcctgcac ca 202

<210> 1743

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-G2

<400> 1743

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gtcgatcggt caagaaaaat accagcttac caacaacagc agcagcaagc ccaccggttc 120
gacgacatgg cccgcctcgg cgccggcgcc gtgttggcgc tcctagtggc ggtcgcgggc 180
gtggccgcgt tcctcgcggt gccggcctcg gcgaagtccg gggagctgag cgcgatgggg 240
ttgctggcgg cgaagggcgg cagcggcgcg ggcccgcaga agtgctcggg cgccgtgggc 300
gagtgcgacc tggacgacgc ggaggagctc gggctgagcg gcggcggcct ccgctccgac 360
gacgcggtgc ggtcggagct ggcgcaacgg aagccgacca accggtacat cagctacgcg 420
gcgctgcgcg cggaccaag 439

<210> 1744

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-H10

<400> 1744

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tttgaggtaa ggtatggctt tcggaagaaa aactgggaga ttgcaagatg ggttgctctt 120
ggcgttggtg tttttgaggc agtgctcttt ctattagctc tggttgtcac ggcaatgaac 180

aaacctgcgg agtatgacag tgatgatgaa attattgcaa ttggacgaag ccctaccatg 240
 cggcagccat tgatccatgc ccaaaatgtg cgggccaccg gtgttcctgt cccaacactc 300
 gatcagcggt caagtagaaa tgatgcctgg agccaaagga tgcgatagat gtatgggtctg 360
 gacacgagcc agttcacgta caaccctca taccca 396

<210> 1745
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-005-Q1-E1-H11
 <400> 1745

tccgggaata cgaacgtcgt acgagaacct ttctcgctcc tctaccttc tctttttctt 60
 gcgacggcag aacaccttcg ccggcgagag catggcgatg gcgtaccgtg tcttgagggt 120
 caccctgggt tcggcaaatg acctcaagaa agtgctgctc ttctcccgga ctgcaccta 180
 cgccgtgggt tccatctccg gattcgacct ccgcacacct tcccacagca cccaagcaga 240
 ccacagcaac ggctgcaacc cctgctggaa cgccgtggta cacttcccca tcccggtgc 300
 cgctgacacc cgcggcctcg cactccacgt gaggctccgc gccagcgtc tatacctggg 360
 cgatcgcgac atcggcgagg tgtttgtgcc catcga 396

<210> 1746
 <211> 371
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-005-Q1-E1-H12
 <400> 1746

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 aattgtggca gaccggggag gacctcacat gcgagtcgct gacgttcagg gtgatgacca 120
 gcgaccaccg caaggccacc tcatggcacg ttctccctgc tgactggaag ttcggcggtca 180
 cgtaccaggc gtccaagaac ttctaagtag ccactttccc tctctttctt caacctgcat 240
 gcccgcaagc agccatgcag atgataacat gcacatgca tgcatttca ttctttcgct 300

catgcactcc gatacgggtgc cggagttaaa aaaatataaa tcaatgtgca aattcanatg .360
 acananaaaaa a 371

<210> 1747
 <211> 281
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-005-Q1-E1-E11
 <400> 1747

cggcggcatg acggcttgcg gaaacttccc catcttcaag gacggaaagg gctgcggctc 60
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 catcactgac atgaactacg agcctatcgc tccctaccac ttcgacttga gcggcaaggc 180
 cttcgggtcc ctggcaaagc cgggggtcaa cgacaagatt cgccactgcy gcatcatgga 240
 cgtcaggttc aaaaggggtgc gatgcaagta ccccgccggg c 281

<210> 1748
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-005-Q1-E1-E2
 <400> 1748

gggtcgagca cgcgtccgca ccccgctctcc gtgcccacca cacctagggt gtccttatcg 60
 tgctcgtcgt tcggccacat ggtgaccccg cccaccgaca caccgccgat caccgccacc 120
 aagaagcagg acgacaagcc gaagccgacg ccggaggccg ccaccgcggc gaactacgcy 180
 tcgttggtgt cgcccaagcg cctcatgcag cgcgtgccc gcgctttccg ccgcagcagg 240
 tcgcgcgccc gcgtcaggac ggtcaaggac ctgcgcgagg aacgggcctc agtgctcgcc 300
 gccagcaaca aggtctccga tgaagcggcg gcggctaccg cggtgccgcc tgcagggtgcc 360
 agtgccaaga cctccagcag caacgatgcy cgcgacggcg ccatgggcag cgtccaggac 420
 gagccgcggc agcagcgc 438

<210> 1749
 <211> 425
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-E3

<400> 1749

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agcaaaccag caatggcccc cgctgcgtc ttctctcgtc tgctcctcct agccgccgtc 120

gccatggcgc cgttcgcggg cgcggcgcgc atcgacgtcg tcgagggcag gtccatggcg 180

tccgcggacg caccggaggc cgcgcgcgac gctcccgtc ctgctcctgg ccccgactcc 240

tcctcgaccc cgtcgccggc accctccagc agcagctctt ccgactagcc gcccggcaga 300

gatatctacg gcgtccgac agtctttggc gccacctatg acctatcgga ttctgcaaag 360

ctatgtatga ttctatggta taatgtgtgg ttgccgcaaa cgcgcggaaa taatgtgctt 420

gcgtg 425

<210> 1750

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F1

<400> 1750

cccgacccta catcgagtcc tgctacaaca acatccgcgt caactccggc gcctccaatg 60

tggccgtcaa cgacgtcgtc ttcaagaaca tcgacggcac ctccaacacg ccggaggcca 120

tcacgtcaa ctgcgccaac aacctgccct gccagggcgt gcagctcatc aacgtcgaca 180

tcaagtacaa caggtccgac aacaagacca tgtccgtctg caagaacgcc atcggaagt 240

ccattggcat ggcgaaggag ctgcctgcg tctgaacctt cttgcatcca tcaactcactc 300

ttcgtaacct ctctctttct cactctcgcc agtctttttt taggcctctg gcaatctgcg 360

aactttccta ctcattccac 380

<210> 1751

<211> 369

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-005-Q1-E1-F10

<400> 1751

tcactttcac gggccgggtg gccccgaccc cggcccgta cccacccttg aaaagcccct 60

cttgcaagaa caagtcaaca acggaaaagg ctttcaccgg aacaatcgcc tccggggata 120

cgcccaaaac cagcctgggg ataacggacg ctttgtcaa cttaaggctc gcaaccgacg 180

ccaacatcaa caaggccaac ccggaggggg acaaggacaa gatcgcaaaa atccttgctg 240

catacggaac gacggccgac gcggtcgctg cggccccgct tcccgagaag ctacagtgca 300

tggagaagac cttctcggtg gtcgccgccg ccgctcatca ggagccgca gcagctgctg 360

ctgctgctg 369

<210> 1752

<211> 341

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-F12

<400> 1752

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ttcatcctcg ccgacggggc ggcgccacag gtcggcgcca tcggcatccc gctcattcgc 120

ggtggccata gcaggccagg agcgccggcc aagctcgcg caccgaagcc gatacctctc 180

aggcacgcgg cgccggcgcc accgaagctg acgccgattg cctcaggcg ctcacatcgtg 240

cggagcctgt gcctgaagac cgactactcc gacctgtgca tgcggggcat cgccaagctg 300

ccgcagtcgc agctgccggt cgggaagcgg ctggacagcg c 341

<210> 1753

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-E10

<400> 1753

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agcacgggct agctagctcc ctccctccca gccatggcga cgccggacaa caaagggcac 120

gggcatccgc tgcccaagtt tggggagtgg gacgtgaaga atccggccac gtccgatggc 180

ttcaacgtca gattccacaa cgcacgtac cacaagagat ccaccagcgg ccctggagct 240
 cggatcgcac actcatgcca ttgcgcggtc ttcacgaact gcggaggtga cagtgggtac 300
 aggcccgatt tcggagacgg caaccattac acgccgccca aacggtagaa gtgggccttc 360
 tgtcgtctgt gaatcgaaac tcgtgtgtgt gctgtgtgtga c 401

<210> 1754
 <211> 301
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D10

<400> 1754

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 cgcggcggcg taactaaggc ccacgtcaac cagggcatgt ttaaggcggc accgtgggtcc 120
 aactggcacg cgacttacta cagtggggca cagcggttag ctgacacgac cgacaggggc 180
 gcatggtgat acaacggcga cctgtgcaaa tcatgaatgt agctgtatgg aggcttttca 240
 tacttcactt tacaccaacg gcacccggta cggcgtgtac tactatctca atgggtcccag 300
 t 301

<210> 1755
 <211> 201
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D12

<400> 1755

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 ccaaggttac gcccagggcc actccaatct ccgttgaggt ttccgctgat gaacaggtag 180
 cttataaggt ggtcgtggtg g 201

<210> 1756
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D4

<400> 1756

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cggccgacgt ggccgcgctg ctgctggctg caccggtgtc gcctgccgcg cacgcggtgg 120
cgggtggcggg ggccgggaggg ggcgcgtcag tgccagcggg tccgctggac atcgcgacgc 180
tgggcgccaa aggcgacggc aagtcggaca gcaccccgat gatcctcaat gcgtggaaaa 240
acgcatgcga agcgacgggg gtagagaaca tcgtgatccc gtcgggcaag tacctgacgg 300
tcgggctgga gctgaagggc ccctgcaagt cctccatcat caatcagtct cgaacgcaac 360
ctgctcggca ccggggacct cagggcggtta cacatgaact ggatcgaga 409

<210> 1757

<211> 281

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-D9

<400> 1757

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tgcgctccggg cctaggcacg tggcatcggt cgagatgata ccagtctgta cacgcgcaga 120
gtgggtcatc gggaggatta cctggtagag gtcagaccac eggcttctcg ctctctcaca 180
ctagcgtatt ctcggggatg ataaggagg agcgtaacgc catatccaca ccataaggca 240
tgacgtacag tgaccttctt taagggcac acggtcggct g 281

<210> 1758

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B9

<400> 1758

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gctccgctcg cgcaccccat ccagcggcg gcagacagag agcagggatc ggccgggtccg 120
ccgtcgacat ggctcggtag gtggagatgc tggacatggg cgtgcgcac gcggcgaggt 180

tccactcgca ctgcccgcag acggcgcgca tgtactacaa gccgccgcag acgcagacgc 240
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cgtcggtccg gcggcccttc gcgctcgcg cggcggcggc ggcgggcgcg gatttccgcg 360
ccggcgaccg gtcggggccat catcagctgc acggcttgga caccgcgcaa g 411

<210> 1759
<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-C10

<400> 1759

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ggtcgctcgcg caggtagcca cagatcacc gtcaggctgc agcgctcaac agccgggac 120
tgaaagctca tcgccgcctg tccgccttgc atcgaccga gtgaactacg atattcatat 180
tcgatcatct tttgtatctt cgacatgagt actatgtaa tccgtggtga agacctgagt 240
aattagtggc acgccagagc ttgagtgttg attagatgta actggtggct tc 292

<210> 1760
<211> 171
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-C11

<400> 1760

ggtcgacgac gcgtcaaggc ctaagcggtt gtaggctgtg cccatgattc caggcgaaca 60
tgtacttata tcgccgtggg taatcaggctg agcgctgct ccgtatcatc ctgactgctg 120
tccgatttag gaggaacggc catgcataga gcagagccac atttcgaatg t 171

<210> 1761
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H10

<400> 1761

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 atgacctaa cttcttgag cctaacgagg tcattgggac agtcaagaat aaatcatctg 180
 gggaaacat tgcacatcca cctccatgg ctcatgccat tttagcagt ggagaaagca 240
 tggtttctga agcggaacct cttctgcaag tgggtggagt tgcatttgt caggaggaag 300
 atagtatcaa aaatttagag agtccatgtg cttgcactgg cagtctaaag tatgtcata 360
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 agc 423

<210> 1762
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-H12
 <400> 1762

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 acgagcctct aaagcactcc tggggcgcca tctggaggaa ggacagcgac aagccgatca 120
 agggacccat caccgtccaa ctcaccaccg agggaggcac taagaccgtc tacgacgatg 180
 tcatccccgc cggttggaag cccaacactg cctacaccgc caaataaact aaccaaataa 240
 taataagtat caaatggcac acttgataga cttttatttt ttatttttta tttaataaaa 300
 ggatataagg agtgtgacaa acaacaacac gaatattgta ttgtctatgt atctcctata 360
 tatgcaatcc caattttatc atggccacat tttaaaatgg aatatatgat atatat 416

<210> 1763
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-H2
 <400> 1763

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 tcctttctct gccgcgccg cagcggcaag cgcggtggct cccggccagg cttgtcgtcc 120

tcgtctctct cgtccccgtg cccctccgcg aggagggcgt cgccgccggc cggggacgag 180
acggagcgcg tcttccgcaa gttcgacgcg aacggcgacg gccagatctc gcggtccgag 240
ctggcgggcg tggtcgagag cgtggggccac gcggccaccg acgacgaggt gtcgcgcatg 300
atggaggagg ccgacgcgga cggcgacggc tacatcagcc tgcccagatt cgcggcgctc 360
atggactcgg cgtccggcga cgccgacgcc gtcgaggagg acctgcgcca cgccttctcg 420
gtcttcgacg ccga 434

<210> 1764
<211> 431
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-H8
<400> 1764

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atgttatcag tatcacatac aaacaattat tacaggattc acatcaaagc aattcaggta 120
caaggctaac atcagtacaa caccaaaaga tagattgggc attgcatgaa tcacatgcgt 180
atgaagaagc cagaagagtg gatagctgtt tgtgatctct tcctgttctc ttctgttcac 240
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aaaagggttt caaagtaaac aggttggttc agaaacgctt cacagaaagt ggcgcgacga 360
gtagtgtatg tgcagctgac atgtatgtat agttaanagg gaactaactt tcgctcataa 420
atgtaaaata a 431

<210> 1765
<211> 393
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-005-Q1-E1-A11
<400> 1765

gtcctgcgc cgcccgctccg atccggtcac tggccgggga gggctcagaa acctttcatc 60
caatacatat atctatctga gccctttccc gcggtgaggc ccgaccggag tccacacaca 120

cacggtgtcg atggcgggccg taataaggag ccgccgccgc gtgtccgttt tcttctacgt 180
 cgtcctcgcc gcagctgcag ctgcagccgc ggcgcaagca tccaataacg tcacctccga 240
 cgaggagtac tgggcggagc ggcgcgaggt ggctcggtcg cgcaacctcg ccgcctacgt 300
 cagcgacccc gtggccgcca cgaaccgctt caacgcggac gtgctgaggg ccacgacgcg 360
 gcgggctgctg gcgaagtacg atggcccgtg cat 393

<210> 1766
 <211> 140
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A4

<400> 1766

ccctcgcccc ggagccccga tctgtcccc gtctcctcct gggcaggtcc cccttttccg 60
 cgtgtgcgta ggccggctgg ttcccgataa gggggttgct ggcggtggag gccgcgggcg 120
 cggcgtcggt cccggcctcg 140

<210> 1767
 <211> 211
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-004-Q1-E1-G2

<400> 1767

gcatggtgag aaggaagagt caaagggcat cgatgcgaaa gcgtccgggc ctggtgggtc 60
 cttcgacatc accaagttgg gcgcctccgg caatggcaag acagacagca cgaaggctgt 120
 gcangangca tgggcatcgg cgtgcggcgg cactgggaag cagacaatcc tcatacccaa 180
 gggcgacttc cttgtcggac aactcaactt c 211

<210> 1768
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E2

<400> 1768

gacccgaccc gtccacccac gcatccggag agacgcatga ccgccggcga cgatcgacga 60
 tggaggaacc agatacccg cggcggcgat cgatggctcc gcgcagctca tcggcggcga 120
 cgtgcctgtg cctcgctctc gccgcggcca cgctggcgct ggcccacggg gcgcaaggag 180
 gaggaccatc ggcacggcg gcggacctgg acaatgtcac ggccgatacc ttcttgga 240
 tcgagatcga cggcaagcct gcaggccgga tcgtgctggg actgtttggg gacaccgttc 300
 ctaaaacagc agagaacttc cgagcacttt gcacacggga gaaaggaatt gccaaagtccg 360
 gcaagcctct gtggtacaag gggtcgacgt tccacaggat catcccgggg ttcatgat 418

<210> 1769
 <211> 444
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-E3
 <400> 1769

gaccacccg tccacgacaa ggccgggtac ctgccgtgga atggcgactt cgggctcaag 60
 acgctgtggt acgccgagta cgccaaccgg gggcccgcg cgcacaccgc cggccgcgtc 120
 acatggccc gctacaagaa ggtgatcagc aaggaggagg ccgaaaagtt caccgtgcag 180
 aacttcttgc acgccgagcc gtggctcaag ccacccggga cacctgtcaa gtacggcttc 240
 tgggcgtgag cacatattct tgtggagacc agaggatgtc gatgaagcag aggaagtcac 300
 ctatgcctag tttgcctatg catggtggta aatcactaat cgtccattgt tgggagcatg 360
 ttcacccag gacggacgag ataaggtgct gagttgatat gaccataatc catgtacagt 420
 gtgtcacctg aacacttggt tgta 444

<210> 1770
 <211> 135
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-004-Q1-E1-E6
 <400> 1770

acgcgtccat cgtgttcttg ctctccgct tcgtctgctt cgctgtcgcg gcggtcttgt 60

tcgcttccgt cgcgttggtg gtgtcggctg ctgggctcgt ctctgtcttc cttgcgtctg 120
cttcttcctc ctcc 135

<210> 1771
<211> 238
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F12

<400> 1771

ccacgcgttc cgccaatcca tcttgggagg gcgccgctcg tcgagggcta gccaatgctt 60
gccatggcgg acgtccggtc tgcctgggtc cagcaccatc accgtcgttc cgatgcgtcg 120
tctccggcat cctccgaggc tgtgccggct gcgagggctg ctgacgccct gcgccaacgc 180
ccgcgggggc tcgtgcaggc gtcgtagcgg gaccagggct cgttgtcgac tgagcacc 238

<210> 1772
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F3

<400> 1772

acttacattc tgcaggatct aagcaaagac ttgatttagt tatggacgga ttggtaggcc 60
tcttgaaagt tcccttggtc cggggatatca accttgcta ccgcgacgca agaggcaccg 120
atccgtatgt cgtcctacgg cttggcaaga agaaactgaa gacaagcgtg aagaagagat 180
ccgtgaaccc catatggcaa gaggagctaa ctctgaccgt cacagatccc agccaaccac 240
tgaagctgga ggtgttcgac aaggacacct tcagcagaga cgaccccatg ggagacgcgg 300
aggtggacgt ggcgccactg atggaggcgg tgagcatgaa cccgcgggag gagagtctga 360
ggaacggcgc catcatcagg tccgagcggc cgagcgccag gaactgcctc gccga 415

<210> 1773
<211> 321
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F4

<400> 1773

acccgccccgt ccaaatacctt gacacccctc acctccgtca ccccaccaca tccggccagc 60
ccaacgaaaa tgctcgcgcg cacagctgcg gtcctcttct acatcctcgc cgctcgctgcc 120
ctcagcgcg gagggcacc ggcagagtca ccgaacgcag gcagtcctgc caaggcacccg 180
gccgagtcac cgaaggcatg cagtcctgca gtccttgcca aggcacccga gtctgctgcc 240
acgaaaactt gccccgtta gggaaactcca gccgccttca accccgccgt tggcggttgc 300
ccatccttct cctcctccaa g 321

<210> 1774

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F5

<400> 1774

caagcctcta ctctgagtcg tactacgcgc gtcgagggcc agccaaagct tgccatggca 60
gccgtccggt ccgacagggg ccaccaccac caccgccgct ccgatgcgtc gtgcccggca 120
acctccgcgg ccgtggcggc ggcgagggcc gatgacgcc tgcgccagcg cccgcggggg 180
ctcgtgcagg tccgggagcg ggatcagggc ccgctgtcga cggggcacca gcacctgcac 240
caccatcacc accagctgct gcggtcggcg gcgttccac cccgccgcc ggggccgggg 300
cgccgctctc ctacgcgtg ccaatgccac ctcaacatca gggagcagcg ctctgcagc 360
gaggtggccg gctgcaccgc g 381

<210> 1775

<211> 385

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-004-Q1-E1-E1

<400> 1775

gtcctcctcc tccgcttct tgggcctccg ttcggccggc ttcttcccgc aggccctggt 60
taaggtagg gaaggcagg aacacggtg cgccttcaac ccgcaggtcg ccggcatctg 120
ctctgcacc ccgttcccgg aggtgtgcac gtccaccgcc gggcggcacg cgtccaagta 180

acttgtctcg tttta

434

<210> 1780

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A9

<400> 1780

cccaacatca ccaccaacta caacggcaag tggctcaccg ccagggccac ctggtacggt 60
cagcccaacg gtgccggcgc tcctgacaac ggcgggtgcgt gcgggatcaa gaacgtgaac 120
ctgccaccct acagcggcat gacggcgtgc ggcaacgtcc ccatcttcaa ggacggcaag 180
ggctgcggct catgctacga ggtgagatgc aaggaaaaac ctgagtgtc gggcaatcca 240
gtcacggtgt acatcactga catgaactac gaggctatcg ctccctacca cttcgacttg 300
agcggcaagg ccttcggctc cctggcaaag cccgggctca acgacaagat tcgccactgc 360
ggcatcatgg acgtcgagtt cagaagggtg cgatgcaagt accccg 406

<210> 1781

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-B1

<400> 1781

ccgacccttc gatccaccaa attattaagg aaaggcccgg ccttttcctt cggacatcaa 60
cagggggaag gggaaaccac ttccattcac ccggcggcaa taatggcctc ggttccggct 120
ccggcaacaa caaccgccgc cgtaatecta tgcctatgcg tcgtcttctc ctgtgccgcg 180
gctgacgacc ccaacctccc cgactacttc atcaagggcc gcgtgtactg cgacacctgc 240
cgcgccgggt tcgtgaccaa cgtcaccgag tacatcgcg gcgccaaggt gaggctggag 300
tgcaggcact tcggcaccgg caagctcgag cgcgccatcg acgggggtcac cgacgcgacc 360
ggcaactaca cgatcgagct caaggacagc cagcaggagg acatctgcca agtggtgctg 420
gt 422

<210> 1782
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-004-Q1-E1-B10

 <400> 1782

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 attgctggaa tgggatctga tctctttggg tcatacgag agtcttcttg tgctgccctt 120
 gttgttgctg ctatttcac tttcggaatc gaccatgatt tcaactgggat gtgctaccca 180
 ctctttgtta gctctgttgg tatcattgtc tgcttgatca ccaccctttt tgctactgat 240
 ttctttgaag tcaaggctgt gaaagaaatt gagcctgcac ttaagaagca gctcatcatc 300
 tccaccgtcc tgatgaacttt tggatttgct ctaatcagct gggtggccct tccagctaag 360
 ttcaccatct acaacttcgg tactc 385

<210> 1783
 <211> 319
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-004-Q1-E1-B3

 <400> 1783

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 aggccccagc tgaggccgcc gtctcaacac ccaagggtgc gcccgaggcc actccaatct 120
 ccgttgaggt tgccgctgat gaacaggtac ctgagaaggt ggtggtggag gagccggctg 180
 cggcggccga cgttgagcat cagaaggcta atgaggtgct cgctccagag gcggccgtcg 240
 ccgagccccga ccacaaggag gaggaagccg tggagaagac cgtcgtcgan gaggagaagc 300
 cagcggcagc agcccatgc 319

<210> 1784
 <211> 460
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-004-Q1-E1-B6

<400> 1784

gcgggcccgga ccaagcggtcc agctggggca gggcggggttc gggtagctgt acaagggcgt 60

gctcgccggc agcggggaacg aggtggcggt gaagcagctc aagtcgggca gcgggcaggg 120

ggagcgcgag ttccaggcgg aggtggagat catcagccgc gtgcaccacc gccacctggt 180

gtcgtctgtg ggctactgca tcgcgggcaa ccagcgcgtg ctcgtctacg agttcgtggc 240

caacaacacg ctggagcacc atttgtacgc caaggacggc cctgtcatgg actggagcac 300

ccgcatgaag atcgcgctcg gctccgcaa gggcctcgcc tacctccacg aggactgcc 360

tctcggatc atccaccgag acatcaaggc cgccaacatc ctgctggaca acaacttcga 420

ggccatggtg gcggacttcg ggctgggtcaa gctcacgacg 460

<210> 1785

<211> 340

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C1

<400> 1785

gtaacccaaa aggtattcaa aaaaacttgc ggtttgaaaa ccatgaccat acaacagctg 60

aatgggtcac cttccaacgg tgacaagttg agcggcgtag cgaatcttaa ggctgggatt 120

tctctgctca atataagact gagggcactt gaagatgacc aggagtttct caagcaggtg 180

ttgagttccc tccaatgcgg tagtgatgga ctgcagtgtg tacaggagat aagcggccat 240

ctagcagagt tgccaagagt tgtgactcgc taaggaaaat ggttttgccc cgagtccaaa 300

ttgttaggtc atcatgacgt cttcccatgc agcagactaa 340

<210> 1786

<211> 369

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-004-Q1-E1-C2

<400> 1786

gggaaaactc tcttctent cctcctctc tcgaattcgg tccctggccc ctgtcgctc 60

cccgcgggtc cgccgttttt taagggggaa aggaggcggc ggagaagaat gatgagggag 120

gaaaggttgg ttccgtgtga ggcagccctc gccggcgga tcaccgccgc ctctcgtcgt 180
ggactcgtcg gtgtcgacca ttccatgccg ggctccgact acaactacct caagttgcc 240
cgtaatctct acgaagtcga aatcctcact gggcagcttc agaactaaac tagtgactac 300
accctacacg tgttgggtat gttattgcgc tgtgtacatc ttcatgcaga ctttcatgat 360
tccaaggac 369

<210> 1787
<211> 184
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C3

<400> 1787

ggaaggctcg gtcccaatcg cgctctgct cctgctcccc ctctctctcc tctcgtctc 60
cactgcgtcc gctgcacgga ccgtgggcca caccgtgcag gacgcgtgca gcaagacaca 120
attccccaag atctgcgtgg acagcctcac cgcaaagcca gagaaccaga agggcgaccc 180
gcgc 184

<210> 1788
<211> 332
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H12

<400> 1788

cgctcttagc gatggcgaca ttgtggcggt ggacatcaag gagaatggct ccgatacgta 60
cgagcctcca gtgcactcct gcggctccat ctgctcggtc gcagacagag agatagtgag 120
agagagggag ggagagaggg aaccgggaga ccgccaccaa gcgtgaggca gaggaggagc 180
atggcgggcg cgccgtcgag gtcccggggc gactacgacc acctgattaa gtcctgctc 240
atcggcgaca gcggagttgg aaagaattgc ttgctgctgc gcttctctga tgacacattc 300
acaacaagct tcatcaccac cattggcatt ga 332

<210> 1789
<211> 325

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-H6

 <400> 1789

 acagagcgct tcatggtgaa aaaacaggac gggctggtga agctgcaggg gtccaagcaa 60
 gggaggaagg ggcagctcgc gatcgacgcc gagatcttcg aggtgacacc ggcctttcac 120
 gtcgtcgagg tgaagaagtc ggcaggcgac acgctggagt atgagatgtt ctgcagcaag 180
 ggcctaagac cttcactcag cgacatctgc tggagcagcc gatctgagga gaacatggct 240
 ccttcagtgg ttcagccatc ataaattgaa accatccctc ttagaccgtc tccagcactt 300
 tatccatatg gtccccccct cttag 325

<210> 1790
 <211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-H7

 <400> 1790

 ttgcactaga ttaacgcata ccatgttgcg gcatacaacg tgaacccac agtgaggcgt 60
 catcaaatga gaatagacag gtccctgcac caaatctggc tcttcctctt tgtgtttgtg 120
 ctgctgtgcc tgctcgtgtt ctgagacagc tgattgttct atacgcctct ttgtcgatat 180
 tgaacatggg gacagaggga tactaatggc tgacacgtat agtatacagg gtaatggctc 240
 gtatcgacaa gcatgtgtct aaagcatgct gatatacagt tgtaatatga tgaaacatgg 300
 gatgtcaaca tgtatatattc attcttctcg tcataacgtc atcggtttcc tgatc 355

<210> 1791
 <211> 335
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-H8

 <400> 1791

 cgcgccgca agaacgagcc gcgcacgtcg ggcgcgtcc acgactgcca ggagatgctg 60

gggtacgcc tgcagagct caagtcgtcc ttcgacaagc taggcggctt cgagatgacc 120
aacttcaaca aggccgtgga cgacctcaag acgtgggtca gcgccgcgct cacgtaccag 180
gacacctgcc tggacggctt cgcgaacgcc accaccaccg aggcctccgc caagatgcag 240
aaggcgctca acgcgtcgca agagctgacg gaggacatcc tgnccgtggt ggaccagtcc 300
tccgacacgc tgggagggct caacattcgg ccgcg 335

<210> 1792
<211> 422
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-A1

<400> 1792

cgggccaacc aanccttcga ggcccttgca agggcgactt gacaatcaag ttggatggca 60
accggctggc gaccacggac ctaagccagt acaaggaaca tggttaattgg atcgagattc 120
tacgcgtgga taacctggtc atcacgggca agggaaacct tgacgggcag ggcccagccg 180
tgtggagcaa gaactcctgc accaagaagt atgactgcaa gatccttccc aactcgctgg 240
tgatggactt cgtgaacaac ggggaggtgt ccgggggtcac gctgctcaac tccaagttct 300
tccacatgaa catgtaccag tgcaagaaca tgctgatcaa agacgtgacc gtgacggcgc 360
ccggggacag cccaacacg gatggcatcc acatgggcga ctcacccggg gattcacatc 420
ac 422

<210> 1793
<211> 283
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A3

<400> 1793

cgtccacaaa gaaacaggca catatgaacg ttacatcaag ttggccttca atccgggaac 60
aggttgcaat ggctgtggtg ttgggggttct tggtgaccgg cgcattggtgc ggtcctccca 120
aagtcccccc aggcaagaac atcacggcca cctatggcaa ggactggctg gacgctaaag 180
cgacatggta tggcaagccg acgggtgccc gtcccacga caacggtggt ggctgcgggt 240

acaaggacgt gaacaagccc cccttcaata gcatgggcgc atg

283

<210> 1794

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A5

<400> 1794

accacgcgt ccacaaagaa acaggcacac aagaacaaat acctcgccac caacaatggc 60

ctccaggtcc tccatcctac ttgcaacggc gatgctggtt gcgctgtttg cggttggttt 120

gtgcaccacc ccgctcacct tccaggttgg caagggatcc aagcctggcc acctgatcct 180

cacccccaat gttgcaacca tatctgacgt ggagatcaaa gagcacgggg gcgatgactt 240

ctcctttacg ctcaaggagg gcccgaccgg cacctggacg ctcgacacca aggccccgct 300

caagtacccc ctttgcatcc gctttgctgt caagtccggt ggctaccgca tcgccgacga 360

cgatcatcccc gccgatttca aggcgggcac cacctacaag accacactca gcatctaata 420

agcctctgat ga 432

<210> 1795

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H10

<400> 1795

cgcggtcatg gacggcaatc atgctgacgt tcgacaaccc gggcatgtgg agcgtgcatt 60

ccaacatctg ggagcggtag tacctcgggg agcagttcta catcagcgtc gtctcgccgg 120

cgcgatcact gcgcgacgag tacaacatgc ccgacaacgc cctccgctgc ggcaaggctc 180

tggggctgcc gctgccgccg tcttacgcc ccgcgcgcta agacgacgaa ggctcgttt 240

tctcctcgtg gtctgaccat ccaatccaaa ctcaaaagaa caaatacgaa agaagcgtag 300

tgaaggggaa caaatgaatg gatatatgta atcttgagat gcatgccctc tcaaatcact 360

gtactggggg tctcaaaaaa atcattgtaa tgggagttat atatataac 409

<210> 1796
<211> 339
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G1

<400> 1796

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tgccgggcaca ggttgcatg gttgtggcgt tgggtgttctt ggtgagcggc gcatgggtgcg 120
gtcctcccaa agtccccca ggcaagaaca tcacgggcac ctatggcaag gactggctgg 180
acgctaaagc gacatggat ggcaagccga cgggtgccg tcccgcgat aacgggtggcg 240
gctgcccgtg caaggacgtg aacaagcccc ctttaatat catgggcgca tgcggcaaca 300
tccccatctt caaggatggg ctgggttctg ggtcctgct 339

<210> 1797
<211> 336
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G12

<400> 1797

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tcgccgggag ccacgtgggg aggtacttca agctggacgc gcgcaagagc tccttcacca 120
aggagctccg cgccggcgcc gccacgttcc tcaccatggc ctacatcatc tccgtgaacg 180
ccgcaatcct gaccgactcc ggccgtccgt gcacggcgcg ggactgcacc cccgtggcca 240
ccgccaccaa ctgcagcacc ggggactgcg cagtcgtcgg ggctaaggct aacccggggg 300
tacagcagtg cctggcgcg aacaagagcg acctga 336

<210> 1798
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G4

<400> 1798

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gcacgagcgc tccccgctcg ctgaaccatg gcgggctccg cgggtggccgt cgtcctcctg 120
tcggccgctcg cgtgtctctg cctgtaccac ctctttttcc tctccctgtc cgtcccggac 180
ccggcagcag cagcagcagc cgtcccccg cgcgccgggtg gccaccgtgg cagcaacggt 240
ccgtccgggt caggaaccgc caacgtcgtc ctccgcttcg gcctgtccgg gcagccgctc 300
cgctccacg accccgcgc cgcgcgcggc ctcccgga tgcacacctt ccgcggcaag 360
ctccagcggc tgcttctctc cgacgaccac gaccccggt ggtcgcgcgg ct 412

<210> 1799

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G9

<400> 1799

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ctcaaagggtg gcatgcagat cttcgtgaag acacttactg gcaagacgat aacccttgag 120
gtggagtcct cagacaccat tgacaacgtc aaggccaaga tccaggacaa ggagggcatt 180
caaccggacc agcagcgggt gatcttcgcc ggcaagcagc tggaggatgg tcgcaccttg 240
gctgactaca acatccagaa ggagagcacc ctccacctgg tgctccgcct caggggtggt 300
atgcagatgt ttgtgaagac attgactggc aagaccatca ccttggagggt ggagtcgtct 360
gacacaatcg ataatgtcaa agccaagatc caggacaagg 400

<210> 1800

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D8

<400> 1800

ggtctagaac tcgcggggccg acccaagcgt ctatggaaaa tctgtccatc atctttacaa 60
ggtcaatgtt cgggccatca tcacacgcct actataatgt tagaagcagt tgcttcacaa 120
gatttatgga tttggcatgc tttttttgga ttacctggct ctctcaatga catcaatgtt 180
cttcacgat ctccctgtt cgcaaaatta tcaaatggag aaagtccaca agtgaattat 240

agaataaata accatgacta ttcaatggga tattaccttg cagatggcat atacccttct 300
 tgggcaacat tggttaagac cataccagaa ccacggggca ataaaagaat ctactatgtg 360
 aaggcacaag a 371

<210> 1801
 <211> 401
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-E12

<400> 1801

ggggaatggc ttcggtggcc aacaatgggg aaccaaccgg tggcaacaat gacaactaat 60
 aagcccttct tcttcttcgc cctgggggtcg gcgctccttg gtgcggcgcc ggccgccgca 120
 aacgcgcccc gcggggcggt cagcaactgg gtggcgatga accagcagag ctacgcgctg 180
 tacgcgcaaa aattccgtcg gggacggggg caaggagccc ctggacaaga agctgtcgga 240
 ggcggtgaag aagaaggtca cgtacgtggt ggaccccagc ggcaagggcg actacacgaa 300
 catcaccgcy gcgctggagg atatncggt gagcaaacac aagcgctga ttctggatct 360
 caagcccggc gctcagttac gcgagaagct gttcctgaac a 401

<210> 1802
 <211> 370
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-E2

<400> 1802

gccgatgccg actctagatt gaatcttggc aggcgccgcy cgtcgagggc cagccaaagc 60
 ttgccatggc agccgtccgg tccgacaggg tccaccacca ccaccgccgc tccgaggcgt 120
 cgtgccccgc aacctccgcy gccgtggcgg cggcgagggc cgatgacgcc ctgcgccagc 180
 gcccgcgggg gctcgtgcag gtccgggagc gggatcaggg cccgctgtcg acggggcacc 240
 agcacctgca ccaccatcac caccagctgc ggcggtcggc ggcgttcca ccccgccgcc 300
 cggggccggg gcgccgccct cctcagcgct gcgaaagcga cctcaacatc atggagcacc 360

gctcctgcag

370

<210> 1803
<211> 423
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-003-Q1-E1-E3

<400> 1803

ttggcctcac gatatgccga gtcattattac anataattcc aattcatata tgaacatttt 60
tgccctcctta tttcttgaaa atgtggaatt ggaattcctt tcctttggct tcaggatagg 120
cctaataaga aaacaaataa ttccaattca tatatgaaca tttttgctc cttatttctt 180
gaaaatgtgg aattggaatt ccccgaggaa ttccgatctc atttcctttg gcttcaggat 240
aggcctaata agaaaacaaa taattccaat tcatatatga acatttttgc ctccttattt 300
cttgaaaatg tggaattgga attccccgag gaattccgat ctcatttctt ttggcttcaa 360
gatangccta ataagaaaac aaataattcc aattcatata tgaacatttt tgccctcctta 420
ttt 423

<210> 1804
<211> 303
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-E5

<400> 1804

gcaagactct aactgagtc gtattactac ccgcagatgc ggcgcgcgca cgtcgccctc 60
atctacctcg ccgcgccggt cgtcgcgttc tgcgacggt acgccttcgg cgtgacggac 120
atgaacctgt cgagcaccta cggcaagctc gccatggtgc tcgtgggctc cagcgtgggg 180
cgcaacgacg gcggcgctgt cgccggcctc gtggcctgtg ggatcgtgat ggggaccatg 240
tccaacgcca acaaactgat gcacgaactc aagaacgggt acctgacgct gaactcgccg 300
cac 303

<210> 1805
<211> 99

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-E8
 <400> 1805
 cgaaactgaa catgtgcat atgtttatca acctattgaa ggtttatatc ctctacttat 60
 cacanacaag cagagcaata ttcttgaaga tctggacac 99

<210> 1806
 <211> 287
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-003-Q1-E1-F12
 <400> 1806
 gaccaccccg tctacgcccg gaccgcccg ttcgggggac cgcaccaggc gggccccccc 60
 ggcgcccgca caaccgggta cccaaggccg cccgcgcgcg ccttcaacct cgtctgctgt 120
 cgctcctccg tgatggccga cgtcgacgtg gacgccaaca acgaggccga gcaaaggacg 180
 cgctcggagc cggggacctc catgtcgccg tcatcgaggc cgcacgacga cacggccagc 240
 agtacacca acgagtcctc ggcgcgccg ttcgcggggc aaacgct 287

<210> 1807
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-003-Q1-E1-C10
 <400> 1807
 gaccgcccg tccaaccacg cgatcgaaa tctcgccctc gttgcggtcg tccacatcct 60
 tttctctcct cctcgccggc ccaacctgat tgttcttcaa ccaagaggaa gaaaggaagg 120
 aagggaccgg aagcatcagc catgtcgaac tcggcgctcg gaatggccgt ctgtgatgaa 180
 tgcaagctca agttccagga gctcaaggca aagaggagct tccgcttcat cgtgttcaag 240
 atcaacgaga acgtgcagca ggtggtggtg gacaggctgg gggggccagg agagagctac 300
 gacgccttca cggcctgctt ccccgccaac gaggcgctg acgccgtgtt cgattttgac 360

ttcgctactg acgagaactg ccagaagagc aagatcttct ttatctcttg ggccccggat 420
 acat 424

<210> 1808
 <211> 242
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C11

<400> 1808

gccaaatcct cccgaataac ttggtgccgg gttttgtgac gaacgtccag attcgcggga 60
 tcaagctgct caacagcaag ttcctccacc tcaacatcct ccagtgaag aacgtgctga 120
 tcgacaaagt gacggtcaag ggccccgggg acagcccaa cacgggcggg atccacatcg 180
 gcgactccag caacgtgacc atcaacagca ccaacaaccg ggtccgggac aaatggatcc 240
 cc 242

<210> 1809
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C12

<400> 1809

acgcgatcgc gacagaatgg cttgcacaga caatgcaatg aaagccttgt tcctcctggt 60
 cctcttctgc atcgtgcatg gtgagaagga agagtcaaag ggcacgatg cgaaagcgtc 120
 cgggcctggt gggtccttcg acatcaccaa gttgggcgcc tccggcaatg gcaagacaga 180
 cagcacgaag gctgtgcagg aggcattggc atcggcgctg ggcggcactg ggaagcagac 240
 aatcctcata cccaagggcg acttccttgt cggacaactc aacttcacag gcccttgcaa 300
 gggcgacgtg accatccaag tggatggcaa tctgctggcg aacacggacc taagccagta 360
 caaggaacat ggtaat 376

<210> 1810
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C2

<400> 1810

ggtcgatgcc cgctctaca atgagtcacg tgaacgcgga cttcatcgcc cagcaggcca 60
tctcgtcgag cgtggccgag ttcagctggg acctcaagtt cccgggacgc caggtgctgc 120
tggccgagtt caacatgacc tcggcgggac gcgcgcagaa cttcaagtcg caggcggaca 180
acttcgtgtg cgcggtgctg ccggacacgg cgttccacca ggtgttcac accccgggac 240
gcgtgatcca cctccgcgac ggcgccaaat cgcagtagct gaccagcacg gcgttcctgc 300
tggtggtgta cgcggacctg ctgctgcgga cggggcagac ggtgctgtgc gggaaccagc 360
cgctgcccc ggcccgggtg cagcagttcg cgcggcaaca gatggactac ctgct 415

<210> 1811

<211> 366

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-003-Q1-E1-C3

<400> 1811

acctcgacaa cctcgtcgac gactacgacc gcacgctgc gacctctcc ggcggaggat 60
cctcgcgcac ctncggatc cgctcttcc tcttccccgc caagcccagag tctcgtcat 120
cgctcggctc cctgctcgac gactcttcaa agtccgagaa ctggttcgtc gacgcctca 180
acagcgccat ctccggctcg ctgcacggca taccgagggg gatctccacc gattcagcct 240
ccgtcaactg ccttctcggc ctgcaggacg actcctccgt gcactcccgt agtggagtaa 300
ccaactcggc tcccacggag gaccagcgcg ccagccagcc gaagctcccc ggcggcgccg 360
ccgctg 366

<210> 1812

<211> 339

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C5

<400> 1812

ctcgcggggc gacacaagcg tcaagtacgt ctgccaccag aaggtctgcc ccggcaagcg 60

aagcaactcc tcgcatgtct ccatcaagaa cgtcaccttc cgcaacatct ccggcacgtc 120
gtccacgccc gaagccgtca gcttgctctg ctccgagacg cagccgtgca gcggcgctctc 180
gctcatcgat gtcaacgtcg agtacgccgg caagaacaac aagaccatgg ctgtgtgcag 240
caacgccaag ggaaccgcca agggaagcct ccaggccctg gattgcctcg tctgatcaat 300
gaccttgcac ttgcatgcat tcttcttccg tttcacttt 339

<210> 1813
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-003-Q1-E1-C6

<400> 1813
ctcgcggggtc gacacaagcc tctagatcga ctcatatag agatctatcg atcgagcttt 60
cgttatcctc ctcttacatt acaggtcata gctaagcagg tctgacagga tgtcgtggca 120
gacatacgtc gatgagcacc tcatgtgcga gatcgagggc caccacctga cctccgctgc 180
catagtcggc cagcagggcg ccgtttgggc ccagagcacc gcattcccac agttcaagac 240
agaggagatg accaacaatca tgaaggactt cgacgagccc gggttcctgg ccccgaccgg 300
cctcttcctc ggccccacca agtacatggt catccaaggc gagcccggcg ctgtcatccg 360
cggaagaag ggatctggan gcataactgt gaagaagaca gggcaagcga t 411

<210> 1814
<211> 351
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C9

<400> 1814
tacatcgcta gctcgccacc aacaatggcc tcaaggactt ctatcctgct tgccacaacg 60
aactggcta tggtgttcgc attcggttcg tgcaccaccc cactcacctt ccaggtcggc 120
aagggtcca agcctggcca cctggttctc acccctaaca ttgccaccat ctctgacgtg 180
gagatcaagg agcatggcgg cgacgatttc tcctttacac tcaaggaggg cccagctggc 240

acttggacgc tcgacaccaa ggccccgctc aagtaccccc tctgcatccg ctttgctacc 300
aagtctggcg gctaccgtat cgccgatgat gtcacccccg ccgatttcaa g 351

<210> 1815
<211> 361
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D1

<400> 1815

cagacgttga ggctcgaggga cacggtatct ctgagcttca tcggagagcg acccgccacc 60
gccacgcttg gccgcaagcc gagaagagtg ccggggccggg agaccggacg attattgatc 120
cgtagcagat tcgctaattg cggtacggc ggacatggag cggatcttca agcggttcga 180
caccaacggc gacggtaaga tctcgtgtc ggacctgacg gaggcgctac ggacgctggg 240
gtcaacctct gccgacgagg tgcaacgcac gatggccgag atcgacaccg acggcaacgg 300
ctgcatcgac ttcaacgagt tcatcacctt ctgcaacgca accccggggc tcataagggg 360
c 361

<210> 1816
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D10

<400> 1816

ctgtgaaatg ttgagaacca tgtggctcgtc aatgcgggca caggttgca tggttgtggc 60
gttgggtgtc ttgggtgagag gcgcatggtg cggctctccc aaagtcccc caggcaagaa 120
catcacggcc acctatggca aggactggct ggacgctaaa gcgacatggt atggcaagcc 180
gacgggtgcc ggtcccgcg ataacgggtg cggctgcggg tacaaggacg tgaacaagcc 240
ccccttcaat agcatgggag catgcggcaa catccccatc ttcaaggatg gtctgggttg 300
tggtcctgc ttcgagatca agtgcgataa gcctgtggag tgctccggca agcccgtggt 360
ggtgcacatc acggacatga actatgagcc 390

<210> 1817

<211> 391
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-D12

<400> 1817

acattggtgt taatgttaaa aacaagttgg cctccattcc gggaaaaggt tccaatggtt 60
 gtggcttttg ggtccttggt aaaaggccca tggcgcggtc ttcccaaatt cccccaaggc 120
 aagaacatca cggcaacctt tggcaaggac tggctggacg ctaaagcgac atggtatggc 180
 aagccgacgg gtgccggtcc cgacgataac ggtggcggct gcgggtacaa ggacgtgaac 240
 aagccccctt tcaatagcat gggcgcatgc cgcaacatcn ccatcttcaa agatggtctg 300
 ggttggtgggt cctgcttcga gatcaagtgc gataagcctg tggagtgctc ccgcaaacc 360
 gtggtggtgc acatcacgga catgaaacta t 391

<210> 1818
 <211> 377
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-A12

<400> 1818

gtgccgcctt cggtggcgga caccttgacc cattaccggc tgacggcaac ggcgggcacc 60
 ttctgttaca tcgaccggga gtaccagcag acggggaagc tgggcgtcaa gtcggacatc 120
 tactcgctcg gcgtgctcct gctgcaggtg gtcaccgcgc ggccacccat ggggctcacg 180
 caccacgtcg agaaggccat cgacgcgggc accttcgcgc agatgctcga catcaccgtc 240
 aaggactggc ccgtcgagga ggcgctcggc tacgcanagc tcgcgctcaa gtgcacggag 300
 atgcggccga gggaccggcc ggacctcgca accgtcgtac tgccggagct caaccggtta 360
 aggaacttcg ccacgcg 377

<210> 1819
 <211> 336
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A3

<400> 1819

cgcgacatgg tgatcgagct ctgccaggag ctcatcgtga gcagcgacaa gaccatcgac 60
 gggcgcgagg cgaggtgca catcgtgggc gcgcagatca cgctgcagaa cgtgcgcaac 120
 gtgacacctc acaacctgca cgtccacgac gccgcggcgc acggcgggcg cgcgatccgg 180
 gactcgagc accactgggg cgtgcgggg gagagcgacg gcgacggcgt ctccgtgatg 240
 ggggccagcg atatctggat cgaccacctg tccatgagca gctgcgcgga cgggctgggtg 300
 gacgcggtgg acggctccca cgccatcacc gtctcc 336

<210> 1820

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A4

<400> 1820

tctagagtga atcgtattca tcgcgctgtc gcgggggtag gggctgggtga tcactatcgc 60
 ttgccgctcg gtgatccatg gccgggtccg cgggtggcgt cgtacccttg tcagccgtcg 120
 ccctgctctg cctgtagtac gtccttttgc gtcctctgtg cgtcgcgga gcgcatcag 180
 cgtcagcagc cgtcccccg cgcgccggtg gccaccgtgg cagcaacgtt ccgtctgggt 240
 cacgaaccgt ccaactcgtc ctccgcttcg gcctgtccgg gcagccgctc cgcctctacg 300
 actccgtccg ccgccgctgg cctcccgac a 331

<210> 1821

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A5

<400> 1821

ccgaccaag cgtccaccgc cgccgtaatc ctatgcctat gcgtcgtcct ctctgtgcc 60
 gcggctgacg accccaacct ccccgactac gtcattcagg gccgcgtgta ctgcgacacc 120
 tgccgcgccg ggttcgtgac caacgtcacc gactacatcg cgggcgcaa ggtgaggctg 180

gagtgcaggc acttcggcac cggcaagctc gagcgcgcca tcgacgggggt caccgacgcg 240
accggcacct acacgatcga gctcaaggac agccacgagg aggacatctg ccagggtggtg 300
ctgggtggcca gcccgcgcaa ggactgcgac gaggtccagg cgctcagggg cgcgcgccggc 360
gtcctgctca 370

<210> 1822
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A6

<400> 1822

gcacgcctct acagggcatc ttgtcatggc gcaagggtggc gcccgtcct atggagccgg 60
tggcggacgg gaccgccgcy ctgacgtcaa cgaccggctc gtgtagcgtc aagtatgact 120
ggcaagggtc gtggccagcc gtcaacaagt tcatggccga cgccgacgtc acgctggcct 180
ataagcccggt caggaccaga gcgatcgcgc gctcaatcag cagcatgatc gacatcacgg 240
ggacctacag catcgatctc accgaagttg ctcaacatga catacgggaac catgatgctt 300
atgttcagtg gcctcatcga cgccactacc gcctagcaca tcattgatc 349

<210> 1823
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A9

<400> 1823

ccaaccaagc ctccgagccc ctggctcctg gtccgttttg gttttggggc aatgggtccc 60
aacaacggca acaccaacgg ttacaacagt tcattcccgg aaggcggggc tcacctctcg 120
ccaaaaaggc tctggattcc gggcgtggcg gagggatgtg ctgaggccgg acaggacggc 180
cggcgaagct tgggcgccgc cggcgcccaa ggccaacagc aacgtcccag gagggccctt 240
cggtcgtcgt tgactcatcc agatccagtc gcacccgccc aatcgccatc gtttcatgac 300
acatcgacca gaagatagct agcaattccc atctcactgg tgtgtgttat tttagcttct 360
tttaacgatg aagaactagt ggcgatgatt gaaataatac aacttaatgc aacgaaaatt 420

aagaa

425

<210> 1824

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-B1

<400> 1824

gtcgaccgac ccgccactg aagcatttat cacgcaaaga tcaatgggca atggagaatc 60
tggtgtatat cagaatgata atttgcacaa gtcacagtg ctacatactg ggctgattga 120
tactgatcca agtgtgaact tgcacggcaa tggtggcctc tctgtgtctt cgtctcaaaa 180
tccagttgtg gactgtgttt ctaggagaga ggatccccctt cgtgattggg gcaatatcgc 240
ctgcagtga ggaataattg gatgtgacca taccaccacc gataatgaac acataaagct 300
agcacacagg ctgcacgata atgttcaa atgaatgtacct gtcatagttg aggacgtgac 360
tgataatgtg ccttcaggca ttccatcat 389

<210> 1825

<211> 414

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-003-Q1-E1-B12

<400> 1825

acgcctccct cctccccggc cgggacaaaa cggcggctct tctccttcgg cccctccccg 60
ctctttctgt gaggcgggaa ccaaggcgga tgccgaggcg acggggctcg cgcaccgcac 120
gcgtgtgccc gccgcccggg ggccaggcga ggtggtgagg tgaggccgag cgcgggttta 180
aattgttcac ccggccgccc ttctcgccgt agttttcagt ggtacaagca agggaggaac 240
gaacgtgagg gctgcctgcc tgctgcgga catgggctcc agcctcaagt accgatctgg 300
cctgtgcctc atcgtcgccg tcgtgctgat ctgggtcacc tctgccgagg tcacgcaggg 360
gatattcaca nagtacagac atccatttgc agttacttac ttgggggcct ccct 414

<210> 1826

<211> 354

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-003-Q1-E1-B3
 <400> 1826
 cgtcaacctg gatccaaccc ctacgaagcg gacgaggata gccattgccg aaatgcagcg 60
 gggccctctc cggcggtctc tgccagctgg gtcggggcag gacgcccgat ctgttggtgc 120
 tccgccgaag cccaccattg gcgggcgccct atcgtggatg tggtaggcagt cctgagcagc 180
 gaaagctctg tgcccgggtgc gcggggggtc ctatcacctt cgctcgggtc gtcaccaatgc 240
 ccattctcgg cggtgccatg accttggcgg gactgggctc catggcggtc tccttgagc 300
 gaaagctcca tgtagctacg tggaaggtgc ccacctttgc aagggccacg tcat 354

<210> 1827
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-003-Q1-E1-A1
 <400> 1827
 ctcacggggc gatacacgcc tctagagtga gtcacacctat ggaagctctc ttctttcttc 60
 ctctctctcg tcctctcgaa ttccgtctct tgtctctgtc ctctctgctc ggcttccccg 120
 gttcttgaga ggggaaatag gagggcgagc cgaggagagg gatggggagg gacgagaggt 180
 tcccagtggt ggacgccgcg ctccggcgctg gggtcgccgc cgccttcgcc gctgggctcg 240
 tcggggttta cctttccatg ccggactccg actacagctt cctcaagctg ccacgtaatc 300
 tccaggaact ccaaatectc actggccatc ttgagaacta tactagcgac tacaccctac 360
 aggtgttggt aggtactgc gc 382

<210> 1828
 <211> 256
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-003-Q1-E1-A10
 <400> 1828
 cgccgcaacc gcaacatcag ccatgggcgc ctgcgcaacc aagcccaaaa cgcttgaggg 60

gcaggcccca gctgaggccg ccgtctccac acccaaggtt gcgcccagg ccactccaat 120
 ctccgttgag gttgcggtg atgaacaggt agctgagaag gtggtggtgg aggagccggc 180
 tgccgcggcc gacgttgagc atcaaaaggc taatgaagtg gtcgctccag aagcggccgt 240
 cgccgagccc gattac 256

<210> 1829
 <211> 225
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F9

<400> 1829

ggaactcgcg cgcacgacaa caaggcgag cataggtaca cccgttgac ccgcttgct 60
 ggccctctgc gcgtgttgcc ggcatcgccg aagaggtcag cggccgcaga tttcaaggca 120
 gggacgagca acggtaacgc agtcagcgtc aaatcaatcc atgacgacgt ctgatagatc 180
 ctgtgagatg acctgaaggt gacgttacta ggcgtgtgta ttttc 225

<210> 1830
 <211> 139
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H3

<400> 1830

cagggactcg ctgtcgtctt cgcccaaagg gcccgacgtc gagctgccgc acgcgaactt 60
 caccgtggac cgcctcatcc agatgttcgg cgccaagggg gtcacggttc aagagctggt 120
 ggcgctgtcc ggggcccac 139

<210> 1831
 <211> 344
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-051-Q1-E1-H4

<400> 1831

atcagggctcg agcacacgta cagcacatta tcgatcgaaa actcgccctc gtccgggaag 60
 ggtaaatttg gtccctccccg ggccgggtgt tcaatggaaa aacaaccaac ggtggccaag 120
 ttcggcacct gggacagcgg cgatccccggg tacacggcct acttcgacaa ggtgcgcgag 180
 aacaagggcg ccacggcgcc gccgctgcgc cggccgcgca gcccacaacga ccccgacccc 240
 gaccgcgagc ccgagccaga ggagggggcca atgangagag tcccccgccg tcgtcgtcaa 300
 ggccggcgac cgcgggaggg caccgcgagc cgccgccgcc gggg 344

<210> 1832
 <211> 150
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H7

<400> 1832
 tcgcgctggc gtccgggggt gctggtccac catgaccggc gggcctcggg acccgattcc 60
 gctggggcgc aaggactcgc tgtcgccgtc tcccacaggg tccgaagtcg agctgacgca 120
 cgtcaacttc atcgtcggcc ggctcatcca 150

<210> 1833
 <211> 217
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H8

<400> 1833
 ggcggggcga ggtgcgcgcc gttcccaaca tcaccaccaa ctacaacgga aagtgggtca 60
 ccgccagggc cacctgatac ggtcagccca acggtgccag cgctcctgac aacggcgggtg 120
 cgtgcgggat caagaacgtg aacctgccac cctacagcgg catgacggca tgcggcaacg 180
 tccccatctt caaggacggc aagggtgcg gctcatg 217

<210> 1834
 <211> 203
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-A11

<400> 1834

cggccccgac gccgtgccct acctccagcc gtccttgccc ttctgttcg cggcgcggtc 60

cccgttcctc atcaactgct acccctactt cgcgtacaag gccgaccgg gcaacgtgcc 120

gctcgagtac gtctgtttcc agcccagcgc cgccgggggtc accgacgccg gcacgggggt 180

caagtacgac aacatgctgt acg 203

<210> 1835

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-G3

<400> 1835

cacatgataa aaccagtggc atttgagctt ggcattcctc ctgaaaacat cactgcgaac 60

caattgttac ttggcacatt gggggagtac gccggatttg atcccacaga gcccaattca 120

cacagtgggg gtaaagcaaa agcagtgcac cacatagcac aggaccatgg ctacatgaca 180

gttggtatga gtggcgatgg cgcaactgat ctggaagctc ggcaacctgg cggagcagac 240

ttgttcattc gttacgccgg ggttcagatt agagagccag tcgcagcaca agctgactgg 300

gtgggttttg attttcaaga gccgatcact aacttgccat caattcatta actaacccaa 360

tttatgaaac ctttgcattt gcccggaaca gaaattgcgg 400

<210> 1836

<211> 107

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-D10

<400> 1836

acaacaccct gaggtgagtc gtattaagtc ttctgcactg tgcattggtg caacgcgcac 60

tcacaagata agaattctga atcctcggcg cctggtgggt cattaga 107

<210> 1837

<211> 289

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-C11

<400> 1837

cgtcctatta gctcttctgc accgtacatg gtgataaggc aaactcaaag gacaaccatt 60
caaaagcgtc cgggccctgt gggtccttcg acatcaccaa gttgggcgcc tctgtcaatg 120
gcaacaccgt tagcacgaag gctgtgcacg aggcgtgtgc atcggcgtgc ggcggcaccg 180
ggaaccacac gatcctcatc cccaaaggcg acttcctcgt cggactactc aacttcacac 240
gcccattgcaa aggcgacgtg accatccagg tgaatggcaa tctgctggc 289

<210> 1838

<211> 355

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-050-Q1-E1-G9

<400> 1838

aagcttgcaa aaacttcttc ggtcaatcag ggcattgcta gagcttagat gcctttgtct 60
ctatggaact tccctaagct atgtacaaaa ggggtgttggg aaattgaagc atctcaatca 120
tctagatggg ctaatcattg gtcattgacaa caatgcgcct gaagggttgt gaacttagat 180
gaccttaaag cattgtcaga actaaggcac cttcatatan agagtgttga tagggctact 240
tccggtgcgt ctgcactcgc aaacaagcca ttcctagagg atctgtacct ctctgagcaa 300
gcaccagcaa tagaaaatca ggaggatctg gaggacaaag atgaaacaga aaaag 355

<210> 1839

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-H2

<400> 1839

gggtcgagcc cgcgtccgga gaaacgcgag caaccagcga tcgccccatg gccgccatgg 60
ctcgttccgt ctccctcgtc gtgggcgccc tgctctcct ctccctcctc gtctccgccc 120
cggccagcgc gcggaccgtg ggcgacaccg tgcaggacgc gtgcagcaag acccagttcc 180
ccaagatctg cgtggacagc ctcgccggca agccggagag ccagaaagcg acgccgcgca 240

agctggggga gctgttcgtg aacatcgcg gcgaaaaggg ggtcgggaat ggcaccttcg 300
tgcaacgcag gttcagcgac aaggaggaca gcgacatgtc caggtgctac gacagctgct 360
ccgacgacg 369

<210> 1840
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-H3

<400> 1840

ttcgcggggc caccacgcg atccgatcca ggacaaggag ggcattcccc cagaccagca 60
gcggtcatc tttgctggaa agcagcttga ggacggggcg acgcttgccg actacaacat 120
ccagaaggag agcaccctcc acttggtgct gcgctcagg ggaggcatgc agatcttcgt 180
gaagaccctg accggcaaga ctatcaccct cgaggtggag tcttcagaca ccatcgacaa 240
tgtcaaggcc aagatccagg acaaggaggg catcccaccg gaccagcagc gtttgatctt 300
cgctggcaag cagctggagg atggccgcac cttgctggat tacaacatcc agaaggagag 360
caccctccac ctggtgctcc gtctcaaggg tggatgcag atctttgtga agacactcac 420
tggcaagaca atca 434

<210> 1841
<211> 276
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-H9

<400> 1841

tggggttcaa aaacacggcc ggcgcggaaa agcaccaggc ggttgcgctg ctggtgcagt 60
cggacaagtc aatcttcctc aactgcaaga tggaggggtt ccaggacacg ctgtacgcgc 120
actccaaggc gcagttctac cgcaactgca tcatctccgg cacggtggac ttcatttcg 180
gcgacgcggc ggcggtgttc cagaactgca tctggtgct gcggcgggcc atggacaacc 240
agcagaacat cgtgacggcg catggccgcg cggacg 276

<210> 1842
 <211> 116
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-E6

 <400> 1842

 ccacgcgacc gacacgaccg ccggcgacga tcgaggatgg aggaatcaga taccggcgcg 60
 cggcgatcga tcgtccgcg cagctcatcg gcggcgacgt gcctgtgggt cgctct 116

<210> 1843
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-E7

 <400> 1843

 cgcacgcgta cgagtcattg cgcgcgcgtc gtccttgccg cggagcgcca gcgagctacc 60
 cgaccgcgcg tcaccgttca gctccaacac ggggcaccac cccgtctccg tgcccaccac 120
 acctaggttg tccttatcgt gtcgcgcgtt cggccacatg gtgacccgcg ccaccgacac 180
 accgcccgatc acgcccacca agaagcagga cgacaagccg aagccgacgc cggaggccgc 240
 caccgcggcg aactacgcgt cgttggtggtc gcccaagcgc ctcatgcagc gcgctgcccg 300
 cgctttccgc cgcagcaggt cgcgcgcccg cgtcaggacg gtcaaggacc tcgccgagga 360
 acgggcctca gtgctcgccg ccagcaacaa ggtctccga 399

<210> 1844
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-E8

 <400> 1844

 cccacgcgat ccgaacagag ctagctagcc agccagccag cagccagctt gtcgcccgcg 60
 cccgtccttc ttctcgcct cgtttccatt ccgtcccgcg ctccaccgcg gccgcccgat 120
 tcagggatgg agatgaagaa gatcgctgcg gccgtcctcg tcgccgcctc ggcgccacc 180
 gtggcgctcg ccgcggaggc tccggctccg gccccacca gcggctcctc cgccgtcgcg 240

cccgccgtcg gcgccgccct cggggccgcc gtcgcctcct tcttcgccta ctacattcag 300
 tgatccggcc ggggcgctcg gatgccgacg aagagacgac ggggagagag agtgacatgg 360
 ctggcgcgat tccgatgcgt gggcatgt 388

<210> 1845
 <211> 334
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-050-Q1-E1-F1
 <400> 1845

cccggcacgg actgcaacta ggtccacgcg ctcacggatc acgccggcgt cctgctcaca 60
 aggaatgttg gtatctacga cagccagctt gtcgctaacc cgctcggcta tctcacagac 120
 gtggagctcg ccgtctgaga caccgctggc atcaagcagc atggaactca gcacgacgac 180
 aacgagcagt agactatagc acgggcgagt cccggacatg ctgcacaata ctacaccgat 240
 acacagcgaa cgcattggcat ggatagcact atctaccgca agaagtcgca cacaaggatc 300
 atgacagatg tatcacactg cttgattcac ttgc 334

<210> 1846
 <211> 422
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-050-Q1-E1-F12
 <400> 1846

gtacggtgat gtccgggtga ctcacgcgtc cgagacaaga cgcgcatcaa tgcctgctga 60
 taaggaggag gttctgcagg ctgctgtctc ccgcgttagt gcactggaag aggagcttgc 120
 agctacaaag aagaccttgc aggagactct tgagcgtcag ttggagatcg ttgcatacat 180
 tgagaagaag aagaaaagca agcgtttctt tcgttggtag aagcaaacag cagtgaattg 240
 ttcacgcca cgagaaaaaa ggttttgcgt gtgatggaag cgagctggtg cttgcgtatg 300
 ccagcaagct gcgattctga gtgtaacaca taaggatgtt ctttcattct tcttttttgt 360
 tcccttggtg catcaaattg tgccttaacc acgtcgatgt gctgccaaat tgtcaatccc 420
 tg 422

<210> 1847
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-F2

 <400> 1847

 acgcgtccga ctggatggag tcgtgcagac cgacccccgc tgcctctgca tggtcctgga 60
 cggcaccgcc acgtccttcg gcatcgccat caaccagacc agggcactgg agctccccgg 120
 cgtctgcaag gtcaaggcgc cgccgctcag ccagtgcaca ggcgtccctg cggcacctgc 180
 accgacgcct cccgacgaac cagcagcggc agcggaggaa gaagccgaca cagctgcaga 240
 tgcgccttca gcaaattggga gcctcaagcc tcacagactc aaagaatgca gcgagcttac 300
 tgctttctcat ctgcgcattg ctgtatgcct tctaataagt ggtgatacaa cttcgtctggc 360
 catgtcaccg tgcaggaatt aggtctttcc ctgagtcctg actatgtact taccc 415

<210> 1848
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-F3

 <400> 1848

 tcgtctcacc ctccctccct cacacaaata atacggaaag gtcgcgccct tttcctccga 60
 catccacagc gggggagggg aaaacacgta cattcacccg gcggcaataa tggcctcggt 120
 tccggctccg gcgacgacga ccgccgccgt catcctatgc ctatgcgtcg tcctctcctg 180
 tgccgcgggt gacgacccga acctccccga ctacgtcatc cagggccgcg tgtactgcga 240
 cacctgccgc gcccggttcg tgaccaacgt caccgagtac atcgcgggcg ccaagggtgag 300
 gctggagtgc aagcatttcg gcaccggcaa gtcccagcgc gccatcgacg gggtcaccga 360
 cgcgaccggc ac 372

<210> 1849
 <211> 257
 <212> DNA
 <213> Zea mays

ttctctgatg agagcggttca gggataccca cagtacatga acgggcccac cggcgacaac 240
gcacagccag gccaggactt ccaacagcag tctctgaagc taccggcggc gagcccgtac 300
gacaatttcc taagggtgc tggctgttag gagtccagtt acatgaacga caaccacctc 360
acctcaagat agtcccaacg gaagatcctg caatttttcc ataatttgca gggaaaaga 418

<210> 1852
<211> 284
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-D2

<400> 1852

tacaacactc taacctgagt cgtatgacat cgccctcggc tccgccaagg gcttggctta 60
cctgcacgaa gattgccacc ccaggatcat ccaccgcgac atcaaggcag ccaacatcct 120
tcgggacgag aatttcgagg ctaaggtcgc ggatttcgga cttgccaagc tgaccacaga 180
caccaacacg cacgtctcca cgcgtgtcat gggaactttc gggatatttg ccccgagta 240
cgcgtcgagc ggcaagctca ccgacaagtc cgacgtgttc cccc 284

<210> 1853
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-D3

<400> 1853

acatctctgg atgttacagc gatggatcgc atcatgctac ttatccttgt gtgcatcggc 60
ctggactgat tcggcgctct ggacgccgtc gatgtgagaa cgggctctgg ccttgggttc 120
atcctcctaa agctcctgtc tgttgtgtac ggcaacaagg ccacgcttga ggtcaatgag 180
taccgcgtcc gccaaagtttc gacttctgta gttgaaccat acaagactgt agtgtccact 240
gactccctct tcgagcagac tgatgttgct aaacagcttg atcataatgc catctacgac 300
attagcctgc gatcccttga cattggaacc gcaacctaca ccaggctcaa cacgcttggtg 360
tcccaggtta tcgcatcctt t 381

<210> 1854

<211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-D4

 <400> 1854

 cgggtccagc cacgcgtccg cagcattaca accccaccct gcactcaagg agtgctttgg 60
 actatcatga gcaaggtagc agatgcatcc aaggaggaga tccactccat cgagtcggtg 120
 aaggaggcaa atgcacggcc ggctcagaaa atcaacagcc gcgttggttcg ctactacaaa 180
 gcagcaggag ccacagaagc gccggcgccg gcgcccggcg cagaagcaac ctgatcgagg 240
 agaacgtgag ccttgaagac gtaccacgat gcttctttgt tcggcttctt agatatactc 300
 gaaagctcgt gtgctgagta ttgacagttt cgttgggtgaa acagggttaga acagtagctc 360
 accctcccga gagtatgggt tgaaaatctt tg 392

<210> 1855
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-D5

 <400> 1855

 gcgtccgaag agatgcgctg cgtggacagc cctagcgggt gcaagcccag cgcggcgaca 60
 ctggtggtga cggcgaccga cctgtgcccg cccaacgacc agcagtcgcg ggacagcggc 120
 ggggtggtgca acccgccgcg ggagcacttc gacctcagca tgcccgcgtt cctccagatc 180
 gcacaggaga aggccggcat cgtgcccata tcctaccgca gggtaggcgtg cacgaagcag 240
 ggtggcatcc ggtacaccat caccgggaac aagtacttca acatggtgac gatcaccaac 300
 gtaggcggcg ccggcgacat cgcggcgggt tcggtgaagg ggagcaagcg cgtaaagtgg 360
 acggagatga agcgcaactg ggggcaagtg tggcagaccg gggacgaact caactgcgag 420
 t 421

<210> 1856
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-D6

<400> 1856

cccacgcgac cgacggcgtg cggcggggac gaccagcagc cgccgtccat ggccgcgatg 60
ccggcgtcgc tgcgcgccat ccaggccagg aggaagcacg aggcggcgca gcgcgggggtg 120
cggcggggcga cggccacgag cgcggccggg tgcgccgtgg cggccctcgt caaggccgtg 180
gaggccgtcc agggcgcggc ggccgggggc gccgcggagg ccgcgcgcgg cgccggggac 240
gccgtggcgt ggggtgttcag caaggctcac ctccagtcgc ccgacctccc cgtcggggctg 300
ctcgggatgg tcgcctgttg cctcggcacg atcgtggagg cggcgaggtg ccgcgtggac 360
gcgaggaagc ccgaaggcgg ccccgggcggg caccgcccggg ggcgaacgcc ccggagggga 420
acggggcccc cgcgaggaggaa cc 442

<210> 1857

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-D8

<400> 1857

acgcatccga caccaccggc ccagtaagc tcacctcctc cagttgtcac ccctgccccg 60
ccgaagaaag aagagcagtc attaccacca ccagcagaat cccaaccccc accatcattc 120
aatgacatca tccttcacc tatcatggcc aacaagtacg catctccgcc tccccctcag 180
ttccaagggt attaagcgcc acagagacat ggttgatgaa gcatgaatgg aacagtctat 240
aaggtcacat gcgcagacaa actgctacat gtaaaacact gcaagcgtgt gtgaaattgt 300
ttttttcttt tgcacgtgca cgcgtgagta aattcttatt cgtacatatg tccggacgtg 360
tgtatgtgtg aactagctgc actacatgac gctgcaacgt gtaagaaagt gtgatttgtg 420
tg 422

<210> 1858

<211> 436

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-050-Q1-E1-D9

<400> 1858

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ctagcgggtgg ccgccgatgt cgccaacgcc ggccacgcca agcccctgac gcctggcgagg 120

cgcgtggtac acgacaacca cggcaagtgc acggccggggc cgtggaaacc agcccacgcg 180

accttctacg gcggggcgga cgggtccggc accacggagg gcgcgtgcgg gtacaaagac 240

acgcgcgcgc aaggggtaca gcgtgcagac ggtggccgtg agcacggtgt tgtttgggca 300

agggctctgc ctgcggcggg gtgctacgat gtgcgggtgc ttgacagtcc cagcgggtgc 360

aagcccgacg cggcggcgct ggtggtgacg gcgaccgacc tgtgcccnaa gcaagacaag 420

tggtgcaagc cgccgc 436

<210> 1859

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-E10

<400> 1859

tcccgggggc acccagcgt ccgaaaacgc gtccgtagaa aatcaggagg atctggagga 60

caaagatgaa acagaaaaag aagagaagga acgacaggaa agaagcaatg gccaatgcag 120

aggagatgag tcagggaaaag ctagtgaaaa gatatggaat gagctcaacc caccacagag 180

catcaagaag ctggtaataa agaactacaa aggcgtaaag tttccaaaat ggataaaagg 240

tcccaagcta ggagactcct tccccagcct tgtgtttttg gatcttgaaa actgcatgtc 300

atgtactaaa ctgccttcac ttggcctcct gagtcaactc cagtcgctgc aaatctcaga 360

tgcagactca gtcacacca tcggt 385

<210> 1860

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-E11

<400> 1860

acgcgtccgg acgtcgtggc cagatccgc cagcggcggt gcttcgtcct ggtgctcgga 60

tcgtgtacac aagtctatac gggaaaccgc gtacttgaag gatcaaccct aaatggacac 300
 agggttatca aagcatacgt caatttttaa gttattagtc tggtagccca tgcctgtaga 360
 ggtacagtgt cgggtctccc gttgttgtgc acaggttctc aagcagcatt tcaagttttc 420
 aagtt 425

<210> 1863
 <211> 426
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-050-Q1-E1-D11

<400> 1863

tccgggtgca ncacgcgtcc ggagctggat ttcggaatgg tggcgaacca gaacgggtgga 60
 gtgctcgact ggggtgaagaa actccaccaa gaaaagcagc taggcacgat ggtggacaag 120
 gacctgtgca gcagctacga cagggtggag ctggaggaga tggccaagt gtccttgctg 180
 tgcacgcagt accacccgtc ccaccggccc aggatgtccg aagtgatcag gatgctggac 240
 ggggacgggc tcgcggatag atgggacgcg tctcagaacg tggacacgcc ggagtccgtc 300
 tcgtcggagc tcctgtccca gaagtacatg gacttcgcag cggacgagtg ctcgctcggc 360
 ctgcaagcca tggagctctc cggcccgcag tgaccaaccg gcttgttgac cggacccggc 420
 gggcat 426

<210> 1864
 <211> 74
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-B5

<400> 1864

agtcccatat catcttctgg cttgttcgtg ttggtctcaa tccatgtgga ttgggtggga 60
 ctggatgggt ttca 74

<210> 1865
 <211> 163
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-B7

<400> 1865

catcatcttt caccatttcg tgccaagcat aaacaccctc cacctcgaca gcaaggccat 60

eggctgcctt cgcattggagc gcgcgacggg gtcggcagat atgatgaaga cgtactccct 120

actggacacg gtgcgcaggc acaccatcga gttgaacccc cgg 163

<210> 1866

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-B9

<400> 1866

ctctccacat cgaaggcctc gtgccttctc ttctccctg tcatggagga aatagctgtt 60

tcgcctatga tcgttgccgc cgtagtgctg gacaacaatg gcgctgacgc tgtctcctgc 120

actgccatcc cctaccgtaa caataagcct agatgagaaa gacaatatca atgggggatgt 180

tcccacgatc acctcggccg caagcaacga cgatgatgcg ttgttcagtg tcggagaatc 240

caccaaggac gatggccatc gcttgacgat ggaatgctcc actcacgtct cctccagtag 300

cccttcact cgcaagaagc gcggggcggt cagcctcttc aaggctatgt tcctg 355

<210> 1867

<211> 318

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C2

<400> 1867

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aggtcccgcc cttttcctcc gacatccaca acgggggagg ggaaaacacg tacattcacc 120

cggcggcaat aatggcctcg gttccggctc cggcgacgac gaccgccgcc gtcacacctat 180

gcctatgcgt cgctctctcc tgtgccgcgg ctgacgaccc gaacctcccc gactacgtca 240

tccacggccg cgtgtactgc gacacctgcc gccccgggtt cgttaccaac gtcacccagt 300

taatccccggg cgccaagg

318

<210> 1868

<211> 300

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C4

<400> 1868

acacgcctct aaagggattc ctgctacgct tccctgcgtc tcccctccac cgcgtcgcgt 60

gggccctctg cgctacgagg gcttcaaatt gccctctgcg ccgtcccttc cgtctagcgc 120

cctgccataa tgcacaccca gccatcttct gatcctcctg acacctcgaa catgaacgtc 180

aagctggaga tccctaggca gcacgccatg ccgtcgtcgc ggtccctgcc gcggagcgca 240

agcgagctgc ccgacccgcc gtcgccgttc agctccaagt cggggcacca cccagtctcc 300

<210> 1869

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C5

<400> 1869

gggcaatgag tttttggatc atcagacctc atgccgaatg gtaatggcca cctgcgctga 60

gcagaactgt ttggcctgtg agtccctgt acattcggtt gcgatgtgag ctccctgcac 120

gttcggtcga ggtctatcgt gaccccaacta tccgagattg atgtggatca ttgggttgac 180

atgtcagaca gtatacagcc ggtggcagag gaattcctgt ttgctgtggg taaagcttat 240

cttctgcttt cgtgtttttt cttgcttctt tcgattatgg tgtatgaatg tggtcattat 300

gtattagctg attacccttt cctgctaatt tggactttag tacgcttcat taagtttggc 360

tgattactgt ttaacgggg 379

<210> 1870

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C7

<400> 1870

acgcgtccga atcacttctt cctcctctct ctcctctctc caacacccca tccatcagcg 60

ctgccctccg cattgctctt gatcccatcc agtacatcga ttctccccc aagatcaaag 120

gccggaggag gaagaaaggt tagggagtcg gccatgggat gcttttcatg ctgctgtgtg 180

gcagatgacg acaacgttgg caggaggaag aagcatgacg atccctatgt tcctatccct 240

gctcatgttt ataattttgg acctagccgg ttcccagccc caaccctgt catctccact 300

ggcacagctc agccaattgc agtaccggcc agtcatctgg aagagctgaa ggaaattacg 360

aaaagacttc agcagtgatg cctcat 387

<210> 1871

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C8

<400> 1871

ccggtacgat cctagattcg ccggtccacc cagcgaccg acctcgaagt acttgccgcg 60

ctctggggc ggctgcact gggagcggca gatccgtgcg tccgccgcgc cgaggcggcc 120

ccccgggtcc gccgtggcg ctgggatgtg ggtgctggtc acgggcgccg cgggcttcgt 180

cggtagccac tgctccctcg cgctccgcaa gcgtggcgac ggagtcgtcg gcgtcgacag 240

cttcaacgcc tactaccatc cgctcgtcac gaacgcgcgc atggcgctgc tggcctccca 300

tggtgtcttc gtcgtcgagg gcgacatcaa ggacggccgt ttcttgtgca a 351

<210> 1872

<211> 341

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C9

<400> 1872

catataagct caacaacagc cagctcgca aaataatgaa tagccgcagc atggcatcat 60

cggccgcgct cttggtgcta gccctcgcgc tagtggcggc caccgcccc aaggtagcgg 120

aggcaaagaa gaagagagcg gcggagagcg gcgaggcggc ggaggcgaag aagatccagg 180

<400> 1875

tcgtggctgg ctgcgccacg acctctcctg ctgtcgctgc tggtcgccgt gctagcggtg 60

gccgccgatg tcgccaacgc cggccacgcc aagcccctga cgcctggcgg gcgtgtggta 120

cacgacaacc acggcaagtt cacggccggg ccgtggaaac ccgcccacgc gaccttctac 180

ggcggggcggg acgggtccgg caccacggcg ggcgcgctgc ggtacaagga cacgcgcacg 240

caggggtacg gcgtgcagac ggtggccgtg agcacggtgc tgttcggtga cggcacggcc 300

tgcggcgggt gctacgaggt gcggtgcgtg gacagcccta gcgggtgcaa gcccgcgcg 360

gcggcactgg tggtgacggt gaccgacctg tgcccgccca aggaccagtg gtgcaagcca 420

acgcggggagc atttcgacct cagcatgccc gcgttcct 458

<210> 1876

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-A1

<400> 1876

atccgacgaa acacgcgtcg acctagtcgt cgtcgccctc ctccggcctcg ttttcgcagg 60

catgggttca gaactcgtca ttgttgtagc atcagacacg gtgtagatag catcaacgtg 120

gatgctggta ctaatcatga attcatcact tgtcttaatc aagatcacac ctgtgggaat 180

tctgacatct atacatatcc tgatgcgtgt tctcgcccaa aatcttcctc ctgagtccac 240

tacactcgag aacgtcatca ctcagtgtcc tcaatgtgcc tcggtatata ctccaattct 300

tgatgctctt cacacagtgc atgatgggaa atttttacat ttgactgttc t 351

<210> 1877

<211> 320

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-A12

<400> 1877

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tcgattcatc cggcacagcg ggctatggac cttcagcagc aagctaatta agttggcagc 120

atgcaccgct aaccttatat actactgaga cttccaaatt ctagtatatg taatcctttt 180
 gttcgggttc atgatcgaat tccaaagagt ggaaaacaag caaaagggtta aatatacatg 240
 ccatttttgg aggcattttt ttcattgagg catgttttca tatatggacc actaaatata 300
 catatcattt actttcctac 320

<210> 1878
 <211> 186
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-A5

<400> 1878

acgcgtccgc ctgctcctcc tcgccatctt catcccggct atcaccaccc ccgtcgaggc 60
 ccacattctc gccaggtgt ttggcgacga ccaattccaa cgggcagggc aaccagctgc 120
 acctcagcaa catctcccag gccttgccga tgctcccgag ggtgacaacg ccgcgcgaac 180
 tgctgc 186

<210> 1879
 <211> 282
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-A6

<400> 1879

acgcgtccgc acacgcgtcc gccacgcgt ccgcaagaac gcaatggccg ctctttacaa 60
 tgagcttgag gaagaacgga gcgcttcggc ggtcgcggt agccagacga tggccatgat 120
 caatatgctg cacgatgaga aggctgcaat gcagatggag gctctgcagt acctgaggat 180
 gatggaacag catgctgacc accaccacct ggcgattcag gacctgcacg atttgcttac 240
 cgagagggag aaagagttgc ttgactttgg cgctgagctc gc 282

<210> 1880
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-A8

<400> 1880

cgggtccaccc acgcatccga gtaggtctgc catcaatgga aagccgggaa ctcataatgc 60
ggcgacttct gtcaaaggag aaagttgatg aaaggctgaa cttcaaggag ctagcaacca 120
tgacagaagg atatagtggg actgatctca agaacctgtg cacgacggca gcatatcgcc 180
ctgtgaggga gctaattccag aacgaaagaa agaaggagct ggagaagctg aagcgtgaaa 240
aaggagaaac tccatcggat cttccgaaga atgaagagac catcaccta atgccgctga 300
gcacggcaga tctgaatgaa tcaaacaacc aggtggatcc atgccttacc aagtgaatt 360
tgccacgatg cggatgcaaa ttaacacttt tcaacttgag aaataggtta a 411

<210> 1881

<211> 245

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-A9

<400> 1881

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taaccatgca tgcattgatg catgtatgca tgccccggtg gttacgtgtc attcagctca 120
cgcgctgacc gagtctatac atacgtcgtc accggctggc cacgcatgcg ataaccatct 180
gatattgacc ggactatata atgtattcct aataatcctg cattttccaa gctaattggt 240
ttttt 245

<210> 1882

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-B12

<400> 1882

atgatagtga tgcaccgcga cgtgaaggcg gagaacatgc tgctggaccg gaagcggacg 60
ctgaagatcg ccgacttcgg cgtggcgcg cgtggaggcg agagctgcga ggtgacgggg 120
cagacgggca cgctgggcta catggcgccg gaggtgctgc aggggaagcc gtacgaccac 180
aagtgcgacg tgtacagctt cggcatcctg ctctgggaga cctactgctg cgccatggcc 240

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-H12

<400> 1885

gtcgtataga gccgcctcgg cgactccgtc agcatcccg cgcgcgcgcg ggccgcgtcc 60

gagatggcga gggaccagga ccgctgatac agcgaccact gggggccgccg cgctacgac 120

tcggtctcgc tcagcagcga ctccatgccc gtcctcacgg gacgcacgcc cgtcgagtgc 180

tacagtcctt tcattcgcgc gttccgccac cacttcgcc a cgcacctcgc cagcacgac 240

tcggcgatct aggtcggcat gggccccgcc tgcgacctgc gctaccgcgc gttctcggcg 300

agcaacggc 309

<210> 1886

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-G12

<400> 1886

tccggaaaca atgggtgata ttgagaatca taataatcca attcaattca atgaccgccc 60

ctggatagag tcccctaact cgtggagatc actatgtgtt gtcacgcaat cagactgtca 120

tgctctgtca cacaatgctg acatttgcaa ctttcttgag agaaaaaagg tctcaaagtc 180

tcttgagagt gacttcagca ataaaatgaa ccagctgttg ctaacagctc tgcaaaaaca 240

aaggcaacaa cggatgatgg atgactttgg aggatactat gatgaacgca tgtactggag 300

acaaaatgat gaaattcgtg atgctgataa ggaggcatct gctccatgtt cattagcccc 360

tgtcgcacat cttggagctc atcagcaaga gagttggcag cattcttcat ttggaagtca 420

acatcaacac cagcataaac aaaa 444

<210> 1887

<211> 85

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-G9

<400> 1887

cggggtcgacc acgagtcggy gaaaaacagc agcctcgaat aagagccagc cagagagtct 60
aatagatctc tcaccgctg ccac 85

<210> 1888
<211> 345
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-E12

<400> 1888

tcgtataaca gtaccagag agccatggcg ggtcgtcctc ctgcgctca cggactttga 60
ctccttctcg ctgcgcaaag aacgcgaggt ccagctgcag cgcggcgcaa cggggacgtg 120
gcgataagg cttgatgaac ggcgagcctg acacaggacc tcggaatgca acagtgtcca 180
tgaccggcga cggtcgtgcc gatggacaac tgcccaatg agagcatcca gttttccaga 240
tgcaatgcca gagtaaagtt cagtagtggt aactgcacgg atgacctcgg cgagatcagg 300
agcctgtcgc tgaataaagt tccggagtag ctgtcgcttg catgc 345

<210> 1889
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-F1

<400> 1889

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tgatcgttgc cgccgtagtg ctggacaaca atggcgctga cgcggtctcc tgcactgcca 120
tccctagcgt aacaataagc ctagaggaga aagaaaatat caatggggat gttccacga 180
tcacctcggc cgcaagcaac gaggaggagg cgttgttcag tgcggagaa tccaccaagg 240
acgatggcca tcgcttgacg atggaatgct cactcccggt ctctccagt agcccttcca 300
ctcgcaagaa gcgcggggcg ttcagcctct tcagggcgat gttctgtcc ttcggccgga 360
gcgacgacag catgaagaag acagacgacg acaacacgag cccaagaag agagccatcg 420
cggctgctga tgacgattgc aagcctg 447

<210> 1890

<211> 313
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-049-Q1-E1-C4

 <400> 1890

 accacgcgta cgccctagcg tccgaatgga cgtgtcagac gtatcgtgct cgactcggga 60
 catgggtgtca gccataccgt ccccatctac cagggatacg ccctccccca cgccatcctt 120
 cgccttgatc tggccggtcg cgacctcacc gactacctga ttacgatcct gactgagcgc 180
 ggctactcct tcatcaccag cgctgagcgg gaaatcgtga gggacatgac tgagaagctc 240
 gcctacatcg ccctgcacta cgaccaggag atggagaccg cgaagaccag ctcttcctgtg 300
 gagaagagct acg 313

<210> 1891
 <211> 183
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-049-Q1-E1-D4

 <400> 1891

 tgcacggacc gtgggcgaca ccgtgcaaga cgcgtgcagc aagacacaat tctccaggat 60
 ctgctgtggac agcctcagcg cacagccaga gagccagaag gcgaaccgc gccggctggc 120
 ggagctgttc gtgaacatcg gggcccagaa gggatccggg atggccacgt tcgtgcacgg 180
 gaa 183

<210> 1892
 <211> 251
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-049-Q1-E1-D5

 <400> 1892

 actccctata gaacgtcgta ttatggaggc gatgtctagg ccggagatgg tcgacaagga 60
 ggtggggatg cagtcattcc tgtgcagccg ggtgaatgac agcgatcggc ccgcggtcat 120
 ggctcgctgca gcggcgggcg cgtcaggtgg gtcggagcag cgacgttatg tacgcgccac 180

tcaccaggct gatgcgcgag cgccagggtgc agcagggtca aggcgctctg tctgtgcgtt 240
cgagactgtc a 251

<210> 1893
<211> 335
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-E1

<400> 1893

gggtggcggc cgccatcacc ggctccgatt ccatcatcac cgcctaccgc gagcactgta 60
cctacctcgc ccacggaggg gacctcgtct ccgcgttctc cgagctgatg ggccgctagg 120
gcggttgctc ccgcaggaat ggcggttcca tgcatttcga taggaaggat gccaatcttct 180
acggcaggca cggcatcgtc tgcgcgcgatg tgcccgtcgg atgcggcctc gccttcaccc 240
agaagtacag gaaggatgag acggccacgt ttgccctcga tcgtgacggg tgcggtgtaa 300
gcagggacag ctcttttatg ctctcaagat ttcgg 335

<210> 1894
<211> 469
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A9

<400> 1894

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cgccaaccgt agcaaggagc caaggacatc accaccgccc agcaataatg gcgcagagca 120
tgaggattgt ggcgctggcc ttggtggccc tgctggtggt ggcggcggcg gcgcccgtgg 180
ccaccgcgta cggctgctac gacgactgct acgagcgtg cgccaacggc aagaaagacc 240
ccgcctgcac caagatgtgc aaccaggcgt gcggtccac ggaccagggc gccggtgccg 300
ccggcgccgc gccggcttga tcgcccagcg cattcatcgc ttcagctcga tataatcgct 360
gctccgtcag caaccacat atgattcgat caatcttctt cctctaattt ctcgaccccg 420
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<210> 1895

<211>	502
<212>	DNA
<213>	Zea mays

<211> 341
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-049-Q1-E1-B12

 <400> 1897

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 acaggatgtc gtggcagacg tacgtcgatg agcacctcat gtgcgagatc gagggccacc 120
 acctgagctc tgccgccata gtcagccacg acggcgccgt ttggggcccag agcaccgcat 180
 tcccacagtt caggccagag gagatgacca gcatcattaa ggacttcgac gagcctgggt 240
 ttctggcccc gatcggcctc ttccttggcc ccaccaagta catggtcac cagcgcgagc 300
 ccggcgctgt catccgcggg aagaagggat ctggaggcat a 341

<210> 1898
 <211> 180
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-049-Q1-E1-B4

 <400> 1898

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 ggcgatgctg gttgcgctgt ttgcggttg tttgtgcacc ancccgtca ccttccangt 120
 tggcaaggga ttcaagcctg gccacctgat cctcaccccc aatgttgcaa ccatatctga 180

<210> 1899
 <211> 398
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-H2

 <400> 1899

 gtcggccac gcgtccacaa tgacacgcgc acgcaggggt acggcgtgca gacggtggcc 60
 gtgagcacgg tgctgttcgg tgacggcacg gcctgcggcg ggtgctacga cgtgcggtgc 120
 gtggacagcc cttagcgggtg caagcccgac gcggcggcac tgggtggtgac ggtgaccgac 180
 ctgtgccccg ccaaggacca gtggtgcaag ccaccgcggg agcacttcga cctcagcatg 240

cccgcgttcc tccagatcgc gcaagagaag gccggcatcg tgccgatctc ctaccgcagg 300
 gtggcgtgcg tgaagcaggg cggcatccgg tacaccatca ccgggaacaa gtacttcaac 360
 atggtgacga tcaccaatgt gggcggcgct ggcgacat 398

<210> 1900
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-048-Q1-E1-H4
 <400> 1900

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 ggactgcact ttcgagtggc tctactggcc tcagtgcctg gagcgcttca gcgacaagac 240
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 gtgggacgtg tcgcgcgagt gcgcgcgcac gctgcgcgtc gccaccatgc tgctgaaaaa 360
 ggggtgtggag aagggcctca cgccttcac atcgggagca tcatgtgcag agagaccctg 420
 gacaaggggt cccc 434

<210> 1901
 <211> 323
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-048-Q1-E1-H6
 <400> 1901

cgcgggccga tacacgagtc tacacagacg ttctgggata ccgtatcgcc gatgatgtca 60
 tccccgccga tttcaaggcc ggcaccacct acaagaccac tctcagcatc tgatgagcct 120
 gtgatgagtg atgacgaata atatttccag tccacgtgtc aacgagccaa tattttaattt 180
 ttttcctatg tttattttgt ggcacaacac catctcttca tgtgccttgt tgtgttggat 240
 tgattttatt acatgaattg aatacactgt ttatttaaga ttcttttggg tgaaatatag 300
 tgttcgggtc tattttcaaa agg 323

<210>	1902
<211>	412
<212>	DNA
<213>	Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H7

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atcgcggtgc	cgctgctggt	gctgcacggc	gccgacgacc	tggtgaccga	ccccaggggc	120
tcgcggggcg	tgtacgagcg	ggcctcgtcc	gcggacaagt	ccctcaagct	ttacgacggg	180
ctgctgcacg	acctcctgat	cgagcccgag	aaggacaggg	tgatggacga	catcgtcgcg	240
tggctgagcc	ccagggtctg	acgccggcgg	cgcgttgcgg	tgctggccgt	aggacgcgag	300
cggcttttcg	accatctgca	ggccaaggac	gcctcgcttc	cggatggtgg	gtgatgacgc	360
ggtctggtct	ggtaggtctg	gggccgacgg	agagcgggtg	tggcttctcg	cc	412

<223> Clone ID: LIB148-049-Q1-E1-A12

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ctcgccgcgcg	ccatccgagc	gaacaagcca	accgaccccg	tccccaaggc	aatccgcgcg	120
cgacgtacca	ccaccaccgc	aggagcgaga	tggagatgaa	gaggatcctc	ttcgccgtcc	180
tcgtcgtcac	cgcgcctcg	gccaccgcag	tgctggcctc	caccgaagcc	gccgccgcgcg	240
gcgccccaac	tgctccgag	tcagccgcgcg	aggctcccg	tgtcgcgcgc	gctatcgctg	300
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<223> unsure at all n locations

CC-048-Q1-E1-F3

<223> Clone ID: LIB148-049-Q1-E1-A3

<400> 1904

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gccatgtcga actcggcgtc gggaatggcc gtctgtgatg aatgcaagct caagttccag 180
gagctcaagg caaagaggag cttccgcttc atcgtgttca agatcaacga gaacgtgcag 240
caggtggtgg tggacaggct gggggggcca ggagagagct acgacgcctt cacggcctgc 300
ttccccgcca acgagtgccg ctacgccgtg ttcgattttg acttcgtcac tgacgagaac 360
tgccagaaga gcaagatctt ctttatctct tgggccccgg atacatcgag ggtgagaagc 420
aagatgctgt acgcgagctc caanggacgg ttcaagangg agctggatgg cattcaggtg 480
gagctacaag caaccgaccc gagcg 505

<210> 1905

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F3

<400> 1905

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ggcgtcggca ccatgtcttc tttcaccggc acgcaggaca agtgcgcgga gtgcgacaag 120
accgtccact tcatcgacct cctcacggcc gacggcgta cctaccataa gacatgcttc 180
aagtgcagcc actgcaaagg gatcctctcg atgtgcagct actcttccat ggacggtgtg 240
ctgtactgca agaccactt cgagcagctc ttcaaggaga ccgggagctt ctccaagaac 300
ttcacgccag gtggcaagtc ttcagacaag ggtgaactga caagggcccc cagcaagcta 360
tcatctgcgt tttctggtac tcaggataag tgtgcagctt gccagaaaac agtg 414

<210> 1906

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F9

<400> 1906

gcgcgggtcg atacaacaac ctaaactgac gtcgtgagta gagcgatctc ctctccctct 60

ccctctccga tccattctcc agcgcagcga agtaaactg tctgaccggg caaagatgtc 120

gtggcaggcg tacgtggacg agcacctgat gtgcgagatc gagggccacc acctcgcggc 180

ggcggccatc gtcggccact acggtgccgc ctgagcgcag agcacggcgt tccccgagtt 240

caagaccgac gacatggcca acatcatgaa ggacttcaac gagccagggc acctcgcgcc 300

gacatgcctg ttctctgggc ctaccaagta catggtcac ccatggcgagc ctgggtgccgt 360

catccgtggc aagaagggat caggaggcat caccgtgaag aagacagggc aggcaactcg 420

ggttggcatc taccacgacc cgatga 446

<210> 1907

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G11

<400> 1907

gcgggtcggtt acaatactct acagtgagtc gtactacat caccaccacc aagctcaaca 60

acagccagct cgcgaaaata atgaagagcc gcagcatggc atcatcggcc gcgctcttgg 120

tgctagccct cgcgctagt ggcggccaccg cccacaggt agcggaggca aagaagaaga 180

gagcggcgga gagcggcgag ggcggcgagg cgaagaagat ccaggacgac ttctgctcga 240

cgctgtgcga gggcaagaag gggacggacc tggtcgtgtg caaggagtcc tgcgcgctct 300

cccagcagtc caacctggtg ctgtacggca ggattcagtg caagggaag tgcaccgagc 360

agaagggcat cagggcgccg gccatgaagg tctgccaaga agagttccac aaaggcttcc 420

ttgttaaagg cggcca 436

<210> 1908

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F2

<400> 1908

CGCGTCTGCC CACGCTTCCT GGGTACGTA GAAGTCGTCT AATTCTTGGA TCGAATTACA

cgacttcttc gtccctctct tcattaggag gctaacttgt catctgcagg atctgtgggg 120
tgacttgatt tagttatgga cttactggta cgcgctctga aagttcttct ggttcggcgt 180
atatgacttg cccaccgcga ggcacgaggg tgcgatccgt atctcgtcct gttgcttcac 240
atcatctgtc ggcacatgtg agttgagaag cgatgcgtgt gatccttata gcaggatgca 300
ggagcatctg actgtcatag atcgcagctt accatgtgaa tctggaggtg 350

<210> 1909
<211> 415
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-048-Q1-E1-D5

<400> 1909

acaatactct aaattgaatc gtatcagctg gtatccacga gaccacctac aactccatca 60
tgaagtgcga cgtggatatt aggaaggatc tgtatggcaa catcgtcttc tccggtggta 120
ccactatgtt ccctggcatt gctgacagga tgagcaagga aatcaccgcc ctggctccta 180
gcagcatgaa gatcaagggtg gttgctcttc cagaaaggaa gtcaccgccc tggctcctag 240
cagcatgaag atcaagggtg ttgctctctc agaaaggaa tacagtgtct ggattggagg 300
atccatcctg gcacgtctca gcaccttcca gcagatgtgg attgccaagg ctgagtacga 360
cgagtctggc ccgtccatcg tgcacangaa atgcttctaa ttctttgggc ccaag 415

<210> 1910
<211> 122
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E2

<400> 1910

gtccaccgc ctccggggc gacgacgcg tgctgctct tttccgccac tccaatcca 60
tccccgatct ccaagttatt cctgttctct ttcagaattc gttgcatcaa ccaaagcaag 120
at 122

<210> 1911
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-E8

 <400> 1911

 ctgcggggtc gatacaagcc tctagagtga atcgtcacaa atcttgctgg ggataggcgt 60
 aggaccgtta tgaggccacc acaagttctt agggagggaa caaagaagac agtttttgtt 120
 aactttatgg atttgtgtaa aacgatgcat aggcaacctg agcatgtgat gatgttttta 180
 cttgctgaaa tgggaacaag cgggtcactt gatgggcagc aaaggttggt gatcaaagga 240
 agatttgccc ccaaaaactt tgaagcaatc ctgaggagat acatcaatga gtacgtcatc 300
 tgcaatggat gcaagagccc tgataccatt ctgtccaagg aaaatcgtct gttcttcctt 360
 cgctgcgaac agtgtggatc ttcaagggtc gttgctccaa tcaaagctgg at 412

<210> 1912
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-E9

 <400> 1912

 tcgcggggtcg atacacgcct ctagactacg tcgcggtacc acgaagtggc ctagggacga 60
 cgataaacc atttggtgcg taccatgtag tgtcttctgc tgctctttac ctgcactccc 120
 gggccacggc catgggctgt atgccatttg gtcccgggaa tggcgtcaag gacgatcatc 180
 cagcagccgt cacgtcgctc gtgagcggcg cgagcgggtga cggattgagc gtggacgagg 240
 cttcgttcgt ggccacgacg agttcgggtga cctccatggt cgcggcgaag gaggagacgc 300
 ggcaagccgt tgcggatgat ctcaactctt cgagatcttg cccttgcgag tggttcgtct 360
 gtgaggatga tcagaacagc acgatatact tcgtgggtca gggctcagaa tcaattgctt 420
 cctggcaggg caaccttt 438

<210> 1913
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F10

<400> 1913

tacaacaccc taaactgacg tcgtattaag cgtccggcca ccctcgtctc accctccctc 60
cctcacacaa ataataagga aagggtccgc ccttttctctc cgacatccac aggggggagg 120
ggaaaacacg tgcattcacc cggcggtaat aatggcctcg gttccggctc cggcgacgac 180
gaccgccgcc gtaatcctat gcctatgcgt catcctctcc tgtgccgagg ctgacgaccc 240
caacctcccc gactacgtca tccacggccg cgtgtactgc gacacctgcc gcgccggggtt 300
cgtgaccaac gtcaccgagt acatcgccgg cgccaagggtg atgctggagt gcatgcactt 360
cggcaccggc aagctccaac gccccatcga 390

<210> 1914

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F11

<400> 1914

gcgcgggtcg atacaagact ctaaaatgag tcgtattaaa ccttttctccc tctccacct 60
ttctcctttt cttgccacgg caaaacacct tcgccggcga gagcatggcg atggcggtacc 120
gtgtcctgga gggtaccctg gtgtcggcaa atgacctcaa gaaagtgtcg ctcttctccc 180
ggactcgcat ctacgccgtg gcttccatct ccggattcga cctccgcac ccttcccaca 240
gcaccaagc agaccacagc aacgggtgca acccctgctg gaacgccgtg gtacacttcc 300
ccatcccggc tgccgctgac acccgccggc tcgcactcca cgtgaggctc cgcgcccagc 360
gtctatacct gggcgatcgc gacatcgccg aggtgtttgt gcccatcgac gacctcct 418

<210> 1915

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D3

<400> 1915

ggtcgaccca agcctctaaa ttgagtcata tgagaataaa tagttcgtga atccctgaag 60

cgtgcatata tatattcctg ccaagataaa ggtaatggag tcgtcacgca ggttccagcc 120
ggccgtcatc ctgcttctcc tgctcattgt gtccaccgat atggcacagg caaggggaatg 180
cgagaagtac agtgagcgat ttgttggggc atgcatgac gcagacaact gcgccaatgt 240
gtgccgcggt gagggcttct tggccggcag gtgcagcacc ttccgccgcc gctgcatctg 300
cactaagcag tgctaaacaa gatcgctcga tcgttcgccca tgcacgcaca acctattctt 360
aataacgttc attatctcgt tcttatttat gacgaatgtc atgtatgttc tggtgactgt 420
catgt 425

<210> 1916
<211> 399
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-048-Q1-E1-B7
<400> 1916

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ctgatcaacg acgtgaccgt gacggcgccc ggggacagcc ccaacacgga tggcatccac 120
atgggcgact catccgggat cacgatcacc aacaccgtca ttggcgtcgg cgacgactgc 180
atctccatcg gccccgggac ctccaagggtg aacatcaccg gcgtgacctg cggccctggc 240
cacggcatca gcatcggcag cctagggcgg tacaaggacg agaaggacgt cacggacatc 300
aacgtcaagg attgcactct taagaagacg atgttcggcg tccgcatcaa agcgtacgag 360
gacaccgcct ccgtgctcac cgtctccaag atccactac 399

<210> 1917
<211> 441
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-048-Q1-E1-B9
<400> 1917

gcgggtcggtt acaacactct agactgagtc gcaataccga aggcctcgtg ctttctcttc 60
ctccctggca tggaggaagt agctgtttcg cctatgatcg ttgccgccgt agtgctggac 120
aacaatggcg ccgacgcggt ctctgcact gccatcccta gcgtaacaat aagcctagag 180

cgaccagatc aagcgcgaga tctccgtcat gcgcctcgtc cgccacccca acgtcgtgca 360
gctgcacgag gtgatggcca gcaagagcaa gatatacttc gccatggagt acgtccgggg 420
c 421

<210> 1920
<211> 347
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D1

<400> 1920

tccctagagt atgtcgtgtt acgtcctcgt cgccgcctcg gcggccaccg tggcgtcgc 60
cgcgagggt cgggtccgg gccccaccag cggctcctcc gccgtcgcgc ccgccgtcgg 120
cgccgccctc ggggcccgtg tcgcctcgtt cttcaacgac tacattcact gagcctcgtc 180
gcggccggtc gtcgagggc cgtgcgcgct acgaaacggg atatagagtc tcatcgtgc 240
acgcattccg atacgtgggc agctcttcga ttcgagacat cttgtgtccg cattggcgga 300
ttcagcccgg tatccctcag taacctccat catgcatggc ttgtcat 347

<210> 1921
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D10

<400> 1921

gacacacgcc tctacagtga ctctgtctag tcgtcgtctc actcaccgcc ccttcacgcc 60
tccctcacca aataagggtc cgcccttttc cgacattcac agggggggaca ggaaatcagc 120
ggccatggcc tcgattccgg cgacgacctt cgccgtcatc ttatccgtcc tcttctgtgc 180
cgcggtggc accgcccgtc acaacgacct ccccgactac gtcattccagg gccgcgtcta 240
ttgcgacacc tgccgcgccg ggttcgtgac caatgtcacc gagtacatcg cgggcgcca 300
ggtgaggctg gagtgcaagc acttcggcac cggcaagctc gagcgtcca tcgacggggt 360
gaccgacggg aacggcacgt acacgatcga gctcaatgac agccacgagg aggacat 417

<210> 1922
 <211> 337
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D2

<400> 1922

caagggcaaa aaaaaaaciaa ccccggcggg aatttttgca aaagggttcta atccggcaaa 60
 actaaatttt gttgataata atggcaagtg cttcctggag atgagttact actttgagat 120
 tagaaaggag tggccaggaa ctcaatgatg tgtggacgga ccagcatggc tgactcgctcg 180
 gagtatgtta gagctcatag ctaagccaag cacaagatgt ggactcatct tcaagaatga 240
 ttcattcgct acttcatcgt taatcgcat ttaatttggt ttgaattgtc attgtacgtc 300
 gtttatgaca taaaactggt tattcatcac atatata 337

<210> 1923
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-B6

<400> 1923

tcgcgggtcg atacaacct ctacagtgcc tcgtgatagc cccaacacgg atggcatcca 60
 catgggagac tcatccggga tcaccatcac caacaccgtc attggcgctg gcgacgactg 120
 catctccatc ggccccggga cctccaaggt gaacatcacc ggcgtgacct gcggccctgg 180
 ccacggcatc agcatcgga gcttagggcg gtacaaggac gagaaggacg tcacggacat 240
 caacgtcaag gattgcactc ttaagaagac gatgttcggc gtccgcatca aggcgtacga 300
 ggacgccgcc tccgtgctca ccgtctccaa gatccactac gagaatatca agatggagga 360
 ctacgccaac cccatcttca tcgacatgaa gtactgcccc aacaagttgt gtactgcca 420
 cggcgcctc 429

<210> 1924
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A11

<400> 1924

tacacgactc taaacacact cctggtacga caaggacacg ttcagcaggg acgacccgat 60

gggggacgcg gagatcgacg tggcgccgct ggtggaggcg gcgaacgcga gcccggaggc 120

gagcctgagg aacggcgcca tcatcctgtc ggtgcgggcg agcgccacga actgcctcgc 180

cgacgagagc cacgtgtgct ggaggaacgg caagttcgcg caggacatga tcctccgcct 240

caggaacgtg gagagcgggg agattcagct gcagctgcag tgggtcagca tccctcctgc 300

tgcagccagc aggtgaagga aggaagaaca ggcgacacga agcaatcgca ttttcacctc 360

ttgtgaatgt cggattgtaa acttaatggg gtctgggtca gtcagggtag ttcattgtgtt 420

gcctattaat gtaca 435

<210> 1925

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A12

<400> 1925

acaaccctct atattgagtc gttcacttgg tggccacact aggcattgtct ctcacaattc 60

caatagcaat gggtgctgat atgatcatcc acggccgtca ctattcagca gtatatattc 120

ttggttctgt ccaggatattt tcaggctttg ttatcgcgaa ccttgcagat cgctttttctc 180

gttctctagg gctatcatag tctcataaaa cagaacaggc ccttattagt gcgtgcatca 240

ggaatctcga aggtcggggt ggtaggcca atacttcaga taacctggat cgggagatgc 300

cagaaattat tttccctttg cttcttttaa catagtggag gtgaattttg cctgtggtgaa 360

tagtgaaagg cagcagatga agaagatcac atatgttata gcaacccttt gcaactgtaa 420

attctc 426

<210> 1926

<211> 226

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A4

<400> 1926

cgggtcgacc caagactcta gagagtgtcg tattatcagc tgggtggcacc actgcagctc 60
 ctgtaatggg ttaccgtgta cattgcatag gttcatgtat atatatgcta ggtccttggg 120
 acatgcctac aagggtacagt tccattctgt tcgagagatg tacttatgca cacgggtctc 180
 tgtaacatcg atgcaataat ggccgggtga ctgtaagtgc acatac 226

<210> 1927
 <211> 246
 <212> DNA
 <213> Zea mays .

<223> Clone ID: LIB148-048-Q1-E1-A7

<400> 1927

cctggaagga agacagctct tcgatgtcag tgtgggtgtc ggtcgtagtc tgcctgaaga 60
 ccggtgatgg ttcaccttag aagcatggga tgctcatcat cacactaaaa acctgtgctg 120
 ttgtgttgct gtgtctatcc cagtaatagt tcagttggta ccttatgttc gaggtttgtt 180
 gtaagtagac tgataaatca caattgcagg acccagtctg ctcattaaag ctcgtgggga 240
 agaatg 246

<210> 1928
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A8

<400> 1928

gcgcggggccg atacaagcct ctacattgac tcctactaac attacaggtc atagctaagc 60
 aggtctgaca ggatgtcgtg gcagacatac gtcgatgagc acctcatgtg cgagatcgag 120
 ggccaccacc tgacctccgc tgccatagtc ggccacgacg gcgccgtttg ggcccagagc 180
 accgcattcc cacagttcaa gacagaggag atgaccaaca tcatgaagga cttcgacgag 240
 cccgggttcc tggccccgac cggcctcttc ctcgggccca ccaagtacat ggtcatccaa 300
 ggcgagcccg gcgctgtcat ccgcgggaag aagggatctg gaggcataac tgtgaagaag 360
 acagggcaag cgatggtggt cggcatctac gacgagccca tgaccccccg ccagtgaac 420
 atggtggt 428

<210> 1929
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A9

<400> 1929

cacgactcta ccgtgactcg tagtaatcaa gcagtgggca caggtcgctg acgccttcag 60
 cgcctctgaa gcttacaaca gcaggttgag gcagacgctt gacgccaagc agctcaagac 120
 tggaatgatg cacaagggga aggtgaacag ggtggacttc tcagggccgc tgctgtcgca 180
 gccccggcgc atcgacgagc tcctgcacat ccacgagcag cagatccggc aagctggctg 240
 ccggccatgg ttcataaaag gcaccgagga ggaggagcac tgatggcaga gacacggcat 300
 ggacacaact aaacgccccat cagatttgca cgtacttacc acagagcaag agaagatgct 360
 ggaaacatat caaaggagtt ggaccgtgag ctagctctcc tgatgagcaa gtgttttt 418

<210> 1930
 <211> 447
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-048-Q1-E1-B10

<400> 1930

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 acaagtacga gatagtggaa gtcgctgatg atttactga ggagcgaggg ctgactgtca 120
 tcccgttgct gaaggttgcc ggattcaaag ccgtcttcca cagacacgtg gatccccagg 180
 aggtgaggag gataccaaag gaagagctgt tccggttctc gcaccgggtt ctttctcgtc 240
 tcctgacggg cgaagagggc agcaatgccc cgaaaggctg ccatgagctg gactctgctg 300
 ccaactccagt ggaccttctc aaggttatca cggagcacia ggaagacgcg gtggcgcaga 360
 gtcctaaata ggagtgagcg actccgataa cagcgaagat aacgtanctg gatgtctgag 420
 tgaccagatc cccacttggt taatgac 447

<210> 1931

<211> 433
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-048-Q1-E1-B12

 <400> 1931

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cggcgatcga tggctccgcg cagctcatcg gcggcgacgt gcctgtgcct cgctctcgcc 120
gcggccacgc tggcgctggc ccacggggcg caaggaggag gaccatcggc atcggcggcg 180
gacctggaca aggtcacggc cgagaccttc ttggacatcg agatcgacgg caagcctgca 240
ggccggatcg tgctgggact gtttggggac accgttccta aaacagcaga gaacttccga 300
gcactttgca caggggagaa aggaattgcc aagtccggca agcctctgtg gtacaagggg 360
tcgacgttcc acaggatcat cccgggggttc atgatccang gaggcgactt caccaacggc 420
aacggcacgg ggg 433
  
```

<210> 1932
 <211> 424
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-048-Q1-E1-B4

 <400> 1932

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gcggggccgat ccaagactct aaattaagtc gtagtaaccg cctgagagga aatacagtgt 60
ctggatagga ggatccatcc ttgctccct gagcaccttc caacagatgt ggatctcaaa 120
ggctgagtat gacgagtcag gacctgggat tgttcatcgg aagtgttct aagctctggg 180
tcccccttcg gtccatttt atttattcct tgagtgtttt tcatataagc tactatgttt 240
gggattgcat gcctttgagc aggcaatgtt gttgaattta tattttggga tttatatattt 300
gtggctcact acaatgcata cattgctcca gtcctttcc atgccaaatt tgttgctagt 360
ggtgaaaaca tcaaccacan aaaagagagg atggaaatta ataaagtacc taggatcata 420
ttat 424
  
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<210> 1933

<211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-G8

 <400> 1933

 gggccgaccc acgcatccaa cctcctcgcc tcctccattg accaacaatt aagcctcccc 60
 gaccgccaca tctattaggt gcagccatgg gtgcctgtgc aacgaagcct aagacgcttg 120
 aggggaaagc cccagctgag gccaccatct ccacacccaa ggttgcacct gagaccacta 180
 ccatccacat tgaggttgcg gcaaaacatg cagtagttga gaagggtggag gaggacaagg 240
 aggaggcact aacagtggcg gcgaaacaag agccagcagc caccattgag cctcagcaga 300
 ttgctagtga ggtgaccact tcggaagtgg cggtcgtcgt tgtcgagcct gagaacaaag 360
 aggaggagga agttgtggag aagaccgtca tcgagaagga gaagccatc 409

<210> 1934
 <211> 358
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-H1

 <400> 1934

 aagcctctag agtcagtcgt aatatcatct ggacaacgac accaccaccg gtggcgccga 60
 tgacgtggca cgctgtccg cgcaacggct cgcactgccg gatgaaatcc gggtgcaaga 120
 accagctgcg gtggtcatta gagttggcag actggtgaag gccgaggctg aaagccgatg 180
 acagggaaga tcaggacgac ggtgaccaag cggtttctgg agatcgcttg gatcatatct 240
 atggaggact tctcgatcac ggaacgggaa gcctcgctgg cgcacgtgcc gtctcattgg 300
 actgctaagc taaccgctga ctatgacgct gcagcttcag tcatgactct cttctagg 358

<210> 1935
 <211> 408
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-H10

 <400> 1935

tgtgaaggaa gggggacgcg gaggaagatg gggctcgcgt tcgggaagct cttcagccgg 60
ctcttcgcca agaaggagat gcggtacctc atggtcggcc tcgacgccgc cggtaaaacc 120
accatcctct acaagctcaa gctcggcgag atcgtcacca ccatccccac catcggtttc 180
aatgttgaaa ctgttgagta caagaacatt agcttcactg tctgggatgt cgggggtcag 240
gacaagatca gacctctttg gaggcattac ttccagaaca cccagggctt tatctttgtt 300
gtggacagca atgaccgtga cegtgttgtt gaagccagag atgagctcca caggatgctg 360
aacgaggatg agctacgtga tgctgtgctg cttgtttttg ccaacaag 408

<210> 1936
<211> 418
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-047-Q1-E1-H12
<400> 1936

ccctaaagcg agtcgtatga agggccgacc tctgcccctt gtacaacgca cgcacggtcc 60
ccgtcccaat ggcccagact ctgtccgccc cctcggagct ggccaccctg aagcgcccg 120
tcggcaacga cgggttcggc gatggcagca acaacggcag cgcgaccggc gagaagccca 180
aggcgcgcg gcgggaggcg gacccggcg cggcgatggc cgcggcgcg caccagttcg 240
gcgagcacgg cggcgtgaac atgtccatcg aggcgtcggc gacgttcacg gtgatggagc 300
cggacacgat gcggcggtg ttcgcggggc agctgggccc cgaccgcgga gacatgtaca 360
tctacagccg gcaattcaaa ccgacgggtg tggcgctggg gcggcagatg gcggcgct 418

<210> 1937
<211> 405
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-047-Q1-E1-H2
<400> 1937

gcgcgggcca atcctccaac caagcgtccg gatgatttcg ttagcgggtg aggtgacctc 60
accggcgctg gtggcgggcg cgaacttaac agtgggtgaag gaggtggtga tttcactgac 120
gatggagggt acctcaccgg caccggtggt ggcggtgatt taatcatcgg tggagggtgat 180

ggtggtgaag gagatttcac cgttggaggc ggttcactca catatgctgg agatggaggt 240
gattttacta gtggtggtga gctaaccgaa accggtggag gaggggaattt ggtangtggg 300
ggaggcgagc taataggtgc tgggtgggggt ggagatttca ttgatggcgg tggatgaacta 360
atcggatgatg gtggtggcgg tgggtggtgac ctcaccggta ctggt 405

<210> 1938
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-H4

<400> 1938

gaatgtgaga acaatgtggt caccaatgcg ggctcagggt gcaatgggtg tggagtgggt 60
gtccttgggg accggcgata ggggtggtcc tccaagattc cccgaagtca atctaatacac 120
gggcaactat gcgaaggact ggctggacgc taaagcgaca tggatatggca agccgacggg 180
tgccggtctc gacgataaca gtagcgggtg ctggtacaag gacgtgaaca agcgcccctt 240
caatagcatg ggcgcacgca gcaacatccc catcttcaag gatggtctgg gttgtgggtc 300
cagcttcgag atcaagtgcg ataagcctgt ggagtgtccc ggcaagcccc tgggtggtgca 360
catc 364

<210> 1939
<211> 403
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-047-Q1-E1-H6

<400> 1939

atacacgact ctacgctcag tcttcgcacc ccgttcccgg aggtgtgcac gtccaccgcc 60
gggcggcacg cgtccaagta cccggctcgc gacaacctgg ccgtgctgaa catgcagggtg 120
gacgcgttcg ccaagcgacac cgcgcaggcg cgcaagcacg tcgagaggtc ggccccgacc 180
atccccccgc agcagacgca tgcgctcagc ttctgcgaca ccaggtagat gaacacgcag 240
gacaccatcg gcgcggcgca acggggccatc acgttcaatg acaccggcac cgctaagatg 300

atgctgcagc tcgccgtcca ggacttcgac tcgtgcgacc gccccttcac acaggccggc 360
gtcnccaacc ccatggggaa gtttgacaag gagctcacac aga 403

<210> 1940
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-H8

<400> 1940

cgcgggccga tacacgcctc tagtctaagt catactaccc tctcctgca gctcgccgcg 60
ctggacgcca tctccagcgc gcgtgcccc tctctgctca gatccgatgg ccgtcgagca 120
ctacaccgcg agcgcgctcc tcgaccccc agatacctcc ttctctgcta accatcgcca 180
accaatttcg gggagaagtg tgggggaatc gggtcgccag ctctgatcgt gcgccaccgt 240
aagctgtcca tctccgtgga gaattccctg cgtagcacat aattcgcgcg aggacacgtg 300
tcattctgaaa agcaagttgg tacctggaat ctcaagtgcc aggagaagag cagggtggttc 360
tggaggagcc acaaggcgag gagtatgata tgatctaggt ggcgtttctc agatgac 417

<210> 1941
<211> 437
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-047-Q1-E1-F12

<400> 1941

cgtcgagaca cgcgtctaaa gtcactcggg cggacgcgtg ggacttgcta gggagatcta 60
caatgatgac aggatgactg aaaatttccc catttggtg tgggttgaca tgtccaagaa 120
tttatcggag ctagatttcc ttaaaacgat catcanggtt gctggtgcca atgttggggt 180
tacagaaaac aatgaggaac tctcctcct cctcgcttct gccctttcca aaaggttcct 240
ccttgctcctg gatgacttgg agagcccgag catatgggac aatctgctca aagattcatt 300
gggagatggt gttgtcagag gaagaatact gatcacaact cggaacgagg aagtggcaac 360
aagcatgaag gcaactatcc accatgttga caaatggac cctgagagtg cctgngcatt 420
attgtgcaat caagttg 437

<210> 1942
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F8

<400> 1942

ctcgcggggcc gatacacgcc tctaaaataa gtcattggcag tgaatgtgag aaccatgtgg 60
 tcgtcgatgc gggcacaggt tgcgatgggt gtggcggttg tgttcttggt gagcggcgca 120
 tgggtcgggtc ctcccaaagt ccccccaggc aagaacatca cggccaccta tggcaaggac 180
 tggctggacg ctaaagcgac atggtatggc aagccgacgg gtgccgggtcc cgatgacaac 240
 ggtggcgggtc gcgggtacaa ggacgtgaac aagccccct tcaatagcat gggcgcatgc 300
 ggcaacatcc ccatcttcaa ggatgggtctg ggttgtgggt cctgcttcga gatcaagtgc 360
 gataagcctg tggagtgtc cggcaagccc gtggtggtgc acat 404

<210> 1943
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G12

<400> 1943

cacgcgtctg aacaagctgg tggtaggcgt ctactatcc accaccgcgc cgctccggtt 60
 taatttctcc tcgaccggcc agcgcaattc tgtggctcga tcgatcggtc ggtcgtaagg 120
 caagtgagca agctatatat atatatagga gattcttcga gcgagctagt agcgagatgg 180
 gttccgccgt cctcttttac tgcattcga tcgccgtcgt cgtcgcattg tcgtcgcca 240
 tggtcgccgt cggggccgcc gccccgggg aaacccccaa gttcatctcg gggctgtgcc 300
 cgggtcgggt cgaccacacg cgcgggatta gcgcggtggc cagcagctgc aaggaccgcc 360
 cgctgccgtc gccggagcgc tgctgccccg cgctcaaggc ctacgcgtgc ccctacagcg 420
 agtcatcaa cgaa 434

<210> 1944
 <211> 391

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-047-Q1-E1-G4

 <400> 1944

 cgggtcgacg ctgaccgca tggacgagct gctgcagtcg ggctgcacaa cgtcaaccgt 60
 taccatacac caccgaacga accggcccaa gacacaacgg gccgccagcg gttcggaagc 120
 ccttcaaccg agccgcngcg caatgagcgt cggccagcgc gacggcgggc tgccgcccga 180
 ttcggtggtc gagcggaac cgcacatcct gcgcgacgcy cagcgccctga tcgagaccta 240
 tcacgacgaa ggccgctacg cgatgctgcy cgtggtcgcy gcgccgtgct cgccgttttc 300
 ggtgagccgc gaactgatgc gcgacgcggc cgtgctcgcy cgcgagtacg gcgtgtcgcct 360
 gcatacgcac ctggcgga aa acgtcaacga c 391

<210> 1945
 <211> 250
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-E9

 <400> 1945

 tcctcaacgc tcggcggcac ctccacctgc aaggacgcct gcaacgacct gcccaagacc 60
 atcgacaagg acgacgtcat caacttcagc ctcgacttcg agaaactgca gcgcgtcacg 120
 ctcgatctca tcaccgagge gtccggcacc atgtccgcct gcacgcacct gccaccctcc 180
 aacgccggaa cgccctecta ctgcgcggcc gcgccttcgc ggggctccgc cgatgcccc 240
 gccggcgccct 250

<210> 1946
 <211> 386
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-D5

 <400> 1946

 ttcgcggtcc gacccacgca tccatgcgct gcaagcaaca aagttctact ctgtccaccc 60

gtccatctag ctctcaagaa ccaacccgta ccagcgctat ccggccggcc atggcggcgg 120
 cgcgccggct ctccctgccc ctcgctctgc tggctgctct ggccgtcgcc gggcgcgcg 180
 tggcgagga ctacgacttc ttctacctcg tgctgcagt gccgggggcc tactgagaca 240
 ccaagcatag ctgctgctac cccaagtcg gcaagccggc agtggacttc gggatccaca 300
 gtctctggcc taaccgagac caccgcacgt tcccgagaa ctgcattccc gaccacgcat 360
 tcaatccgtc tattgtgagc gatcta 386

<210> 1947

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E5

<400> 1947

ttcgccggcc gacccacgca tccatcgacg ccgagtacat cagcagggcg ccatacgcgt 60
 gcgagccgga gagcctgccc aagtagcgcg ccaacaagga gatggacgct aagctccgag 120
 aagaatctag aaggaggagc aaccttccga gccaaaggcg cgaggcgcat aagggtctgt 180
 cgagggggca caagagcatg cggctgcagg acacgaacca gagccacgtg cagccgagg 240
 aatcgctgcc cgttgtggcc gaaaacgggg tgacaatggc ggggaacgac ggcgactcgc 300
 ggctgttcgt cgacctggag cccgttccgg ccatcagcaa gcggcacggc ggcagcgctc 360
 gcggcgacca cgcgggcgccg tgcggcaggg ctaggacat gttcaac 407

<210> 1948

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B7

<400> 1948

acaagcctct agaatgagtc gtaatagcgt gcgttcgtgc agccacagac aggcgtccgg 60
 gcacatgctc tttcaccggc acgcaggaca agtgcacggc gtgcgacaag accgtccact 120
 tcatcgacct cctcaccggc gacggcgcca tctaccataa gacatgcttc aagtgcagcc 180
 actgcaaagg ggtcctctcg atgtgcagct actcctccat ggacgggtgtg ctgtactgca 240

agaccactt cgagcagctc ttcaaggaga ccgggagctt ctccaagaac ttcacgccag 300
gtggcaagtc atcagacaag ggtgaactga caagggcccc aagcaagctg tcgtctgcat 360
tttctggtac ccaggat 377

<210> 1949
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B9

<400> 1949

cgcgtaggggtt ccgcggcacc cgatccatct tgggcggggcg ccgcgcgtcg agggccagcc 60
aaagcttgcc atggcgggcg tccgggtccga caggggtccac caccaccacc gccgctccga 120
ggcgtagtgt ccggcaacct ccgcggccgt ggcgggggcg agggccgatg acgccctgctg 180
ccagcgccccg cggggggtcg tgcaggtccg ggagcgggac cagggccccg tgcgacggg 240
gcaccagcac ctgcaccacc atcaccacca gctgcggcggt tcggcggtcg tcccccccg 300
ccgccccggg cgggggcgc gccctcctca gcgctgcgaa agcgacctca acatcagggg 360
gcaccgctcc tgcag 375

<210> 1950
<211> 362
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C1

<400> 1950

cggttcgagc acgcgtccgg ggacgtaaga agtcgtctaa ttcttggtac gaattagacg 60
acttcttcgt ccctctcttc attagcacgc taacttgtaa tctgcaggat ctaagcaaag 120
acttgattta gttatggacg gattggtacg cctcttgaaa gttcggtggg tccgggggtat 180
caaccttgcc taccgcgacg caagaggcag cgatccgtat gtcgtcctac ggcttggtgaa 240
gaataaactg aagacaagcg taaagaagag atccgtgaaa cccatatggc aagaggagct 300
atctctgaac gtcataagac ccagccaacc actgaagctg gaagtgttcg acaatggcac 360
ct 362

<210> 1951
 <211> 99
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-D10

 <400> 1951

 agtcgtatta aagtagacgg cgattgacac gcgtcttcgt cctcgctac ttccgcaact 60
 cggagcttct tcgatttccc atccccgggtg ctgcataact 99

<210> 1952
 <211> 368
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-B6

 <400> 1952

 cacgcctcta cacagacgtc ctgggatcac cgggtgggtgg cccggccagg cgcggtggcc 60
 gggcgggtgc ggctctctgc cccgacctcg gctcggcgcg cgcaggcgcc tggcagcccc 120
 cagcctcggc ctcgggccagg cgcgcgcgac cccagcccc ggctcgccgg ctcgccggtc 180
 atggtggctc cgatccgggc tcctccggca tgggcaggcg cgggttcccc cggctagcag 240
 cctctcctgg tgggcacggc ctgccccggc ggctcaggaa ggcgcgcgcg ccccggcgtg 300
 cacagccgtg gtccagccat ggcgggcgcg gcacgcagcc tcgggtcccc ggcgggcatc 360
 catggcgc 368

<210> 1953
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-A2

 <400> 1953

 cgggtcggtc cacgcgtccg acaacgccga gcgcgacggc ccgggccggt acaacttcgc 60
 gggctacgcy gagctcatgg agatggcgcy caaggccggg ctcaaggctc aggccgtcat 120
 gtccttccac cagtgcggcg gcaacgtcgg cgactccgtc agcatccccg tgccgcgggtg 180

gcccgcggag gagatggaga aggaccagga cctctgctac accgaccagt ggggccgacg 240
 caactacgag tacgtctcgc tcggctgcga cgccctgccc gtcctcaagg gacgcacgcc 300
 cgtcgagtgc tacaccgact tcatgcgcgc gttccgcgac cacttcgccg actacctcgg 360
 caacaccatc gtggaaatcc aagtcggcat gggccccc 399

<210> 1954

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A3

<400> 1954

aaccctctat actaagtect aataagaacc tttctccctc ctccaccttt ctctttttct 60
 tgccacggca aaacaccttc gccggcgaga gcatggcgat ggcgtaccgt gtcctggagg 120
 tcaccctggg gtccggcaaat gacctcaaga aagtgtcgct cttctcccgg actcgcattct 180
 acgccgtggc ttccatctcc ggattcgacc tccgcattcc tttccacagc acccaagcag 240
 accacagcaa cggtctgaac cctgctgga acgccgtggg acatttcccc atcccggctg 300
 ccgctgacac ccgcggcctc gactccacg tgaggctccg cggccagcgt ctatacctgg 360
 gcgatcgca cat 373

<210> 1955

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A5

<400> 1955

gaccacgca tccacggacg cgtgggcgga cgcgtggggt cgacgtccag cagatcgaga 60
 gcggcctggg gcccatgccg gtctacggcg ccggggccgg ggccggctcg ttcaccctgc 120
 agtgggacgg ctgctacggc cccgcggact cgaggcacia cggctaccgc ttcggaagcg 180
 gaggctgcgg gatgcggcac cacggtcgca ccccgagca ggaccggaag aagggcgctg 240
 cgtggacgga ggaggagcac aggctgttcc tcttaggcct gaagaaatac ggcaaggggg 300
 actggaggaa catatcgcg aactacgtcc atacgcggac gcccacgcag gtggccagcc 360

acgcgcagaa gta

373

<210> 1956

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A6

<400> 1956

tcgcgggccc acccacgcga tccacggacg ctcgggcgaa aatccgacat gtacgtgttc 60

tgctgtcctt acgcccacaa cgtcgcgccc aaaggcaagt tcategcctt cgtctccacc 120

gaggccgaga ccgacaagcc tgagatcgag ctcaagcccc ggatcgacct gcttggccct 180

gtagaggaga ctttcttcga catctacgac agatatgaac ccgtcaacaa cccggaggag 240

gactgtgtgt tcttcacaaa tagctatgac tccaccaccc attttgagac gacgggtcaag 300

gatgtgctcg ctttgtacaa caagatcact ggaaaggagc ttgatctctc agtcgatttg 360

aacgctgcta gtgctactga gcaagaagct gcttgaacac ccggcggcct cttttttttg 420

cagctc 426

<210> 1957

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A7

<400> 1957

atactctaca ctgtgtcgta ttaccacgcc cgcaggccgg gaccggcggg gtcgcgcgcc 60

gggtaggagg acgagaagag gaatggcggg atggcggcgc cgccggcgag ggcccgggcc 120

gactacgact accttatcaa gctgctcctc attggagaca gcggtgttgg caagagttgc 180

ctcctgttgc ggttctctga tggttccttc actacaagct ttattaccac aattgggtatt 240

gactttaaga tacgaccaat agaattggat ggcaaacgta taaagctaca gatttgggat 300

acagcgggct aagaacgctt ccggactatt accaccgct actaccgacg agctatgggc 360

atcttgctgg tttatgatgt caccatgaa tctccttt 399

<210> 1958

<211> 443
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-047-Q1-E1-A9

<400> 1958

ctcgcggggtc gatgcacgcc tctagccgca gtgccagcag agcctcgtcg tcgagctggc 60
gctgcagacg cacgcgctgc tgcgcgagct cggcaacccc gcgggcgcgc gcatcgtcct 120
cgaaaccgag cgccgcgcgg cactggaggg cgccccctca gccgccgccg cccgagacgg 180
aggacgcggg gcgtcgcggg ctaataataa gcgcggagtc cgcgcgccgc cgccgccgct 240
gctggacgag ccgtcgtgga ccatgttctg caacggcaag aagaccgggt acgcggtgcg 300
aaggcaggcc acggacgacg acctcgtgt gatggagacg ctgcggggcg tctccatggg 360
cgccggcggtg ctccccggga gggccgcccc ttcgtcggcg cccgacgcgg ctgcngcggc 420
ggcagcggac gacgaggtgc cct 443

<210> 1959
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B10

<400> 1959

ggtcgagaca agcctctaaa atgagtcgta gtaggtgctg gagtcggcgg acctgctcgc 60
gccgcggaag ctggacgcca aggaggagct ggagaagctg aacgaggccc cggcgtcgat 120
gacgctcttc gacttcatgg gctggcactt cgaccaggac gagctgatga agcgcaggga 180
ggacggcacg ctggacgccg acggcgatgc catgctcttc aagaaggcgc ccagcgtggc 240
gccaagaag ttctcctacg tcgacagcct ctctccggc ggcatgagga gccctctgc 300
gcgccactga taataatata tgatcgtcgt cgcgccactg aactaacagc agctcagtca 360
tcgtctacga tccaacagca ccatggatcg tcgatcgtcc actcacgaga aggagagacg 420
tccattggga 430

<210> 1960
<211> 438

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B11

<400> 1960

cggggtcgagg caagcgtcta gaataaatca ttataaaatg gaatttttagt gtaaaaaataa 60
 aaggctagaa cttgttttatt tcatagaaaa ttcatatgaa ctccaaatca cttcattttca 120
 gttcctaataa ttttgtaatt ttatttctcta tcacttagag tctctgggtt gtcattgaaaa 180
 cagtaataaa atttattttat cacttaattc tattttaaac acacgaaacc tttgaaaatt 240
 cataacttaa aatctataac tccaaaaatt atgattcatg ttccctaggat tctatttttaa 300
 tatgtagatt attactgtgt attttgttta tatgtttcat gtgatgttca ttttgtctat 360
 accatgtttg tctgtattgc tacgttttagc agtgaggaca cgtgtcatct gaagagcaag 420
 ttggtacctg gaatctca 438

<210> 1961
 <211> 355
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B3

<400> 1961

agagagtcgt attataagag cggcagggcag gtccgcgagg agggcacgca gaccgacgat 60
 cgagccgtgc gggggctcgg gacgggaacg ggacaggacc ccaaaatctc agatccttcc 120
 tgcccgcccg cccgtgcccg tcgacgcgtc gttcttgccg gccgcgcctc acctccgccc 180
 gcgcctcctc caggggggatc ggatacgcca caggctgcgc gatggtgctg tgggtcttcg 240
 gctacggctc cctcatctgg aaccccggtc tcgacttcga cgacagaatc ctcggcttca 300
 tcaagggtca caagcgcacc tttagtctcg cttgcattga ccacagaggc acacc 355

<210> 1962
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-G7

<400> 1962

acaagcctct acagtgcgtc tcatgatggg tactccgcgc gccttctctt tctctcccg 60
acgtcgatcg tggttcttcag cacgggctag ctagctccct ccctcccagc catggcgacg 120
ccggacaaca aggggacacgg gcatccgctg cccaagtttg gggagtggga cgtgaagaat 180
ccggccacgt ccgaggggctt caccgtcata ttccagaagg cccgcgacga caagaagacc 240
accaccggcc ctggggctgg gaacgcgcgc gcaggcattc cgccggcctt caggaacggc 300
ggcggcgacg gcgggtacag gcccgacttc ggcgacggca accagtacac gccgccccaa 360
cggaagaagt gggccttctg tggtgctga at 392

<210> 1963
<211> 236
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-046-Q1-E1-G8
<400> 1963

aagataaagg taatggagtc gtcacgcagg ttccagccgg ccgtcctcct gcttctcctg 60
ctcatttgtt ccaccgatat ggcacaggca agggaatgcy agaagtacag tgagcgattt 120
gttggggcat gcatgatcgc agacaactgc gccaatgtgt gccgcgggtga gggcttcttg 180
gccggcaggt gcagcacctt ccgcgcgcgc tgcattctga ctaggcagtg ctaaac 236

<210> 1964
<211> 374
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-046-Q1-E1-H10
<400> 1964

acaaccact aaactgactc ttactagtaa aagctggagc ttttctgagc gtgtagggtgc 60
gttgggtggaa cttgggcccc cagtccccca cccaagatct cacctatctg cactgggctg 120
gccggctggg cccgcgcgca accaccgtgc ttccgccatt gcgtcgccgc ataaccttgg 180
ctaagcgtga actttgtcac aacaaccacg tttggcgttt ccatgcttgt cctgggttcc 240
tggcaatccc tgtattaatc cgtctgccat tgcattatct tgcaactgact gatcttttcc 300
aaccgaagga tgtggtgggc ggtagagcta aaagttaagt tggacccaaa aaaagaaaag 360

aaaaaaaaac aaaa

374

<210> 1965
<211> 415
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-046-Q1-E1-H12

<400> 1965

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ctcgcgctag cgtcgtcttt gtcattgctg ctctctctt cgtcgccatg gtcgtagcac 120
cgatggccga ggcaaagtct gccgatgcc ctgtggctga cgcgccggcc gatggaccta 180
gcgggccggc tgctgcacct ggccccagg gtgtcgaagg cctgtcaggc aatgaggatg 240
acgatgatga ctccaccaac tgaggccaca catgtcggcc cggttaaatt tggaacaaga 300
catggaagaa aaatgagagc aatgtcttta aaaccatgaa tccataataa tgtgtggtca 360
tccatggata catccttget ctccctcttt ttctttnggt ttgattttca atgtg 415

<210> 1966
<211> 368
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-H2

<400> 1966

ctctatagaa agtcgtagta gatcccacga actacatgga ggacagcctg gtcgactggg 60
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ggctggagaa cagggtcgac cggctggagc tggagcggat gtgctcctct gccgcggcgg 180
ccgtccgcca ctccagccaag cggcggccca agatgaaaca gatcgtccgt gctctggaag 240
gggacgcgtc gctggacgac ctgaacgacg gggatgaagc agggcagagc atgatgttca 300
gctccggatc ggagtagcag tccggggcca actacgcggc caacatcagc aagttcagga 360
aggtggcc 368

<210> 1967

<211>	383
<212>	DNA
<213>	Zea mays

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<223>      unsure at all n locations
<223>      Clone ID: LIB148-046-01-E1-H3
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tcagaccact	accatccaca	ttgagggttg	ggcaaaacat	gcagtacttg	agaaggtgga	180
ggaggacaag	gaggacgcac	taacactggc	ggcgaaacaa	cagccagcag	ccaccattga	240
gcctcagcag	attgctantg	aggtgaccac	ttcggaagtg	gcggtcgtcg	ttgtcgagcc	300
tgagaacaca	gaggacgacg	acattgtgga	gaagaccgtc	atcgagaacg	agaaccctac	360
agcagtccat	gcataggaaa	ata				383

gaacccacc	cacagcaaac	gactggagat	ctactaaacc	tggaagcaga	ggtgaatcct	60
tcggtctctg	aactcgaaca	aagcaatgca	ttggcactcg	ctattgtagc	accaggtgac	120
tacaagccgc	cagcatctca	aagtatgttt	gatgtcaatt	cgtctgggtg	ggagctggca	180
ctggtcaatg	ctccaagcac	ccatacaagc	caagcagttg	agaccaactt	ggctggaggc	240
tttgacaagc	tgctacttga	cagcctctac	gaagacgagg	ccaggaggca	gcagatcgcc	300
ggcgcgacct	acaccggtag	cctaggagca	gccaacctt	tctgcaccaa	tgccagcgat	360
tcggttcaca	tgtccagcag	atttgacaaa	ccggctaatt	tgcagttggc	actg	414

<400> 1969

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acgactgcaa gatccttccc aactcgctgg tgatggactt cgtgaacaac ggggaggtgt 120
ccgggggtcac gctgctcaac tccaagttct tccacatgaa catgtaccgg tgcaaggaca 180
tgctgatcaa ggacgtgacc gtgacggcgc ccggggacag cccaacacg gatggcatcc 240
acatgggcga ctcatccggg atcaccatca ccaacaccgt cattggcgtc ggcgacgact 300
gcatctccat cggccccggg acctccaagg tgaacatcac cggcgtgacc tgcggccctg 360
gccacggcat cagcatcgga ag 382

<210> 1970

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-H7

<400> 1970

cacgcctcta cagtgagtcg ttttagagcc ataaagcgtg aagttggagt aattggtgct 60
aggcaaaggc cagctgatag tgcagcaata tacacatcta cttctaattgg cttattcaaa 120
gtggtatcag caccaaaggt tagcccatat ttggaatgga agcccatatc agtaagcccc 180
agcactgctg cacctcctgg tgctccatca cctgttgatg atggaagtaa aacagaagtg 240
tctgctttgt ctaagaagct ttcacatgct aatgtatcac atgaacatgt cattataccg 300
gatcacatca ggataccaga ttctgaaaga actcatttca tcttcggttc ttttgaatct 360
gaaatttatc caaatgcttc ttt 383

<210> 1971

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-H9

<400> 1971

gtcgtattat ccgcgacgac atcaacgaac ttccgctcgg atgacgaaga cgtgcagcga 60
catccacatg gcggacgacg ccgtcgccag cggagcggac gttcgccgcg caggggcagc 120

accggcatca cgatcatctac cagggagcag cagcagcagc acgacgacgc tggctgcggc 180
ggcagctacc accacgacaa ggactacatc atcatgcaga cgcaggcgag gagcgggctg 240
gcggtgccagc cgacgatctc cgtgatgggc aagggcggac agccgtgacg ctgcctgcgg 300
gcgcacgcga acggtagaca ccacgtgctg agggagatcg ccctgccgctc gca 353

<210> 1972
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A10

<400> 1972

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gtgcatatat atatataatc ctgccaagac aaaggtaatg gagtcgtcac gcatgttcca 120
gccggccatc atcctgcttc tctgtctcat tgtgaccacc gatgtggcgc aagcggcgag 180
ggaatgcgag aaggacagcg agcgattcct tggggcatgc atggcgctcg acaactgcgc 240
caacgtgtgc cgcggtgagg gcttctccgg cggcaggtgc agcaccttcc gccgccgctg 300
catctgcact aagccgtgct aaattaacct actcccggca gttcgatggt ggacgtttat 360
tctatttatt ggcttacttg attttttccc ccctaacaat aagaaaacgc acgtgctggc 420
atgtacgttg tggtgt 436

<210> 1973
<211> 379
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-G5

<400> 1973

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ttccggctgc tgtatccgtg gtactggcct tctcttgcct ggaacttcgt gatgacctgt 180
gccatgaccg tgtactacta catcctgaac ctgctggtgt cgtgttggga gaacctgacg 240
cggcccagtc accggagaac gcacggtgaa tgaagacgcg gcagcccatc cagtggcacc 300

ttgtgttgtt gttgttgttc atttttcttt cgtttgcgcg agtgggtgtac tagttagtag 360
cagcggctta tgtgttcgt 379

<210> 1974
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A11

<400> 1974

ccactacact aactcgtact aaaggcctcg tgccttctct tcttccctgg catggaggaa 60
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gtctcctgca ctgccatccc tagcgtaaca ataagcctag aggagaaaga aaatatcaat 180
ggggatgttc ccacgatcac ctacagccgca agcaacgagg aggaggcggt gttcagtgtc 240
ggagaatcca tcaaggacga tggccatcgc ttgacgatgg aatgcaccac tcgctgtctc 300
tccagtagcc cttccactcg caagaagcgc ggggcggttca gcctcatcac ggcgatgttc 360
ctgtccttcg gccggagcga cgacagcatg aagaagacag acgacgacat cacgatcccc 420
aagaaga 427

<210> 1975
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-F1

<400> 1975

cgggccgacc cagcgtcta cccagactcc tgctcgacgg ggcagctgca cgtggccgtg 60
ttcaagccgg cggacgacga gcccatggcc gccacaacc cgcgcggcct ccccggtgtc 120
tccaccggcg aaggcctgaa gaaagggacg cgcgtcgggg agggggcgct gagggaggtc 180
gcggcctaca tctcgaaca cccacccagg agcgggaccg cggatgatgg gttcgccggt 240
gtgccgccga ccgcgtcgt ccggtgcacg cacggagcct tcaggcacgg cggagccgga 300
tccggagccg gagcgagggc gccggtgcc aagctggggc ccatgcaggc cttcgttagt 360
aactgcggca gctgcgagga catgggaccc agcg 394

<210> 1976
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-F10

<400> 1976

acaagccact agactcactc gtcttagccc tgcggaccgt agagctcctg gagcaagccg 60
ggttcggccc cgtgaagcag gaccacagcc gcgggctcga ccacggcgcc tgggtgccgc 120
tgatgctcat gtaccgggac gccagcatcc ccgtgtgcc a gctctcggtg cagaccgacc 180
gcgacggcac gtaccactac aacctcggca aggcgctggc gcccctgcgg gaggaaggca 240
tcctcatcct cggtccgggt agcgccacgc acaacctgcy caagattagc ccgtccgacg 300
cgcccggtgcc gcagtggggc gccgagttcg acacctggct caaggactcg ctctcaacg 360
gaagggtacga ggacgtgaag cggtagcagg agaaggcgcc gcacgcgagg gtggcgccacc 420
cgtggccgga cca 433

<210> 1977
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-F11

<400> 1977

tcgtcggtcg acacacgcca ctaaaatgat ccgctccacc tccattgacc aacaattaag 60
cctccccgac cgccacatct attaggtgca gccatgggtg cctgtgcaac gaagcctaag 120
acgcttgagg ggaaagcccc agctgaggcc accatctcca cacccaaggt tgcacctgag 180
accactacca tccacattga ggttgccgca aaacatgcag tagttgagaa ggtggaggag 240
gacaaggagg aggcactaac agtggcgggc aaacaagagc cagcagccac cattgagcct 300
cagcagattg ctagtgaggt gaccacttcg gaagtggcgg tcgtcggtgt cgagcctgag 360
aacaagagg aggaaggagt tgtggagaag accgtcatcg agaaggagaa gccatcagca 420
gtccatgcag aggaaaaata tg 442

<210> 1978
 <211> 249
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-F4

 <400> 1978

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 catgggttgc ggtggctcca aggaggccgt ggccaccggc aacaccagcg ccggcaccaa 180
 ggtcatccgg aggaagtctt cctcgggtctc aaccggcgca ggcaacacct caacaacgtc 240
 gccgtcgtc 249

<210> 1979
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-F5

 <400> 1979

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 acgacgggtt taggtccaat ttgtgaaggt ctcaagaatt cccggatgta tggttttctg 180
 aaagccaatg gcccaaggaa acgttgccac tttatttctt tcgacggagc tttcacgtga 240
 tcatacggct tttgggtagt catctgattg tcttcgtcga acttggttga cccagaggtc 300
 tgagccctag accctcgatt cattagagaa cccgtgatct ggtcattgtc caagctactt 360
 tgttctgatt gcaggaaatc tttaggtgcc aaaagcaact gtacattttt tttt 414

<210> 1980
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-F6

 <400> 1980

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386

<400> 1983

<400> 1984

846

<223> Clone ID: LIB148-046-Q1-E1-D2

<400> 1987

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gtgattatct cgacaaggaa aaggaggaga accccgagga ggacgctgcg cccgtcgacg 180
tctccgcgga cggcgtgtat gtgcctccca aggaggagaa atccggcgaa gacgccacgc 240
cggtcgacgt ctccaccacc accggcaa atcgatcttc ttcttccaag gcaaaccggca 300
agcccacggg aggtcagccc gcagagagct ccaccaccgc caccgccacc gcggatgcgt 360
acgcgtctca aagc 374

<210> 1988

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D6

<400> 1988

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caaggcggcc ggaaggcagg aaatccgtac gcacgccgag gtcgaggtcg aggtctcagc 120
agggaggatg gaaacggagc agcagggcgt ggttgcgggg gtgaagccga cgctggccaa 180
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ccgcgtgttc gacctgttcg accgcaacgg ggacggcgag atcacggtgg acgagctggc 300
gcaggcgctg gacgcgtgg gcctcgacgc ggaccgcggc gggctggccg ccaccgttgg 360
cacctacgtg cccgacggcg ccgcgggcct ccgc 394

<210> 1989

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D7

<400> 1989

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 cggcgccgcc cggccgtggc ccaaggccgt gaccaacggc ggcgtccacg agctgctgga 180
 gtgccccgtg tgcaccaact ccatgttccc gccgatccac cagtgccccca atggacacac 240
 gctgtgttcc acatgcaagg ccagagtaca caaccgttgc cctacctgca ggcaagagct 300
 gggcgacatc aggtgcctgg cgctggagaa agtcgccgag tcgctggagc tcccctgcag 360
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<210> 1990

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D8

<400> 1990

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 tatattcctg ccaagataaa ggtaatggag tcgtcacgca ggttccagcc ggccgtcatc 180
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 agtgagcgat ttgttggggc atgcatgac gcagacaact gcgccaatgt gtgccgcggt 300
 gagggcttct tggccggcag gtgcagcacc ttccgccgcc gctgcatctg cactaggcag 360
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<210> 1991

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D9

<400> 1991

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 cgagggccac cacctgagct ctgccgccat agtcggccac gacggcgccg tttgggcccc 180
 gagcaccgca ttcccacagt tcaagccaga ggagatgacc aacatcatta aggacttcga 240

CGAGCTGGG TTTCTGGCCC CGATCGGCCT CTTCTTGGC CCCACCAAGT ACATGGTCAT

cgagcctggg tttctggccc cgatcggcct cttccttggc cccaccaagt acatggtcat 300
ccaaggcgag cccggcgctg tcatccgcgg gaagaaggga tctggaggca taactgtgaa 360
gaagaccgga caggcgctgg tgatcggcat ctacgacgag cccatgaccc ct 412

<210> 1992
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E1

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<210> 1993
<211> 302
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E2

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gcggcgtcag cccgtccgtc agcgacgggg acgacctcgc cacggtcagg atgcaggccg 180
acggcatcct ctccctcggc gagaacccga actacgcca cctccgggac atcaccgcgc 240
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ca 302

<210> 1994
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-E8

 <400> 1994

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 ccgatggacc tagcggggccg gctgctgcac ctggccccc ggggtgctgaa ggcctgtcag 240
 gcaatgagga tgacgatgat gactccacca attgaggcca cacacgtcgg cccgggttaaa 300
 tttggaacaa gacatggaag aaaaatgaga gcaatgtctt taaaaccatg ataatgtgtg 360
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 t 421

<210> 1995
 <211> 408
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-D10

 <400> 1995

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 cgcgtcgagc ggcaagctca ccgacaagtc ggacgtgttc tccttcggcg tcatgctcct 180
 ggagctcatc accggcagga gaccggttga tcccacgaac tacatggagg acagcctggt 240
 cgactgggcc agaccctct tggcgcgcg gctgtccgaa gacaacttcg acgagctgct 300
 cgacccgcgg ctggagaaca gggtcgaccg gctggagctg gagcggatgt gtcctctgc 360
 cgcggcggcc gtccgccact cagccaagcg gcggcccaag atgaaaca 408

<210> 1996
 <211> 385
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B4

<400> 1996

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gcaagtggct caccgctagg gccacctggt acggtcagcc caacgggtgcc ggcgctcctg 180
acaacggcgg tgcgtgcggg atcaagaacg tgaacctgcc accctacagc ggcatgacgg 240
cgtgcggcaa cgtccccatc ttcaaggacg gcaagggctg cggctcatgc tacgaagtga 300
gatgcaagga aaaacctgag tgctcgggca atccagtcac ggtgtacatc actgacatga 360
actacgagcc tategctccc taaca 385

<210> 1997

<211> 133

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B6

<400> 1997

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ccgctttctc ctattcatca agactgtaat gtctattggt gctacctaata gcttctcact 120
tgtcattttg gac 133

<210> 1998

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B7

<400> 1998

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cacgccgatg tgtaccatga cgtgatectc ccgcccgcgt cgcaggcacg gttcggcttc 180
gagatcaagg aggtgggcat gaccagccgc tacgcgtccg ctgaggatct gcaccagatg 240
gacagcgacc aggaagaggg tgctgagggt ggcgatgacg gtgacagcag ttgccacac 300

gccatcgaca tgcaggcgga ggagttcatc accaagttct atgagcagtt caagtcagaa 360
tcgttcaacg gccgtgcctc cgagtgat 388

<210> 1999
<211> 415
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-046-Q1-E1-B8

<400> 1999

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agcggtagat ctctgtgtcca ggcttctgca gtactcacca aaacttcggt cgactgcttt 180
ggaagcattg gtccatccgt tctttgatga acttcgggat ccaaacaccc gcttaccgaa 240
tggtcgtttt cttccgcctc tcttcaattt taagcccat gagctgaaga acgtgccggc 300
ggatttcatg gtgaaattgg tcnctgagca tgcacggaag caatgtgcct tcgtagggtg 360
gtgatctctg gataagagga tgacgactcg atgattagct gaggaccaag ttaat 415

<210> 2000
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B9

<400> 2000

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gtggcgggcca ccgccccaca ggtagcggag gcaaagaaga agagagcggc ggagagcggc 120
gaggcgggcg aggcaagaa gatccaggac gacttctgct cgacgctgtg cgagggcaag 180
aaggggacgg acctggctgt gtgcaaggag tcctgcgcgc tctcccagca gtccaacctg 240
gtgctgtacg gcaggatcca gtgcaagggc aagtgcaccg agcagaaggc catcacggcg 300
ccggccatga aggtctgcca ggaggagtgc gacaaggcgt acgtggtgaa ggcggccgag 360
gtcaccaagg cctgcagcgt cacctgcgcc aaggagaaga acccgcgctt cagcgagaac 420

tgcaagaggt cctgcaccc

439

<210> 2001
 <211> 389
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-C1
 <400> 2001

gggtcggacc acgcgtctac taactatcag tgcattgtgt catccgtgca cgccggcaat 60
 ggtgtcctcc gcccggtgcgc tcacggcct cctcgtcgcc ggggcctccc tcgccgtcgc 120
 gctctcggat ggcgggcgga tggcgggcgc ggtgtacggg tacgcgggcg ggagcccaaa 180
 cgggcccggag aactggggga agctgagccc cgcgtacaag ctgtgcgggg aggggaagca 240
 gcagtcgccc atcgacatcg tcaccaagca ggccgtcccc gccgccacc tcgacaccct 300
 caaccgcacc tacggcgcca ccaacgccac gtcattcaac gacggccacg acatcacgct 360
 ggcgctccaa ggcaatgttg ggaccgtga 389

<210> 2002
 <211> 113
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-046-Q1-E1-C10
 <400> 2002

tgagtcgtat taaaccggna cggatgcttc tacgtgccgg ttcacctctc tcgtttgatc 60
 ggcgcttcgg ctccgggactg gcgcttgtga ccgagtgatc tgggatggca ttt 113

<210> 2003
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-C11
 <400> 2003

tacaactcac tagagtgagt cgtagtagat ccattctgct aataagcctg cgtgcccttc 60
 gttcttcttc gtctcgatcc cgacgacgct ccgttcggct ccggcaaacc acatcaagtc 120

gcgatggaga tgaagaaggt cgctcgcc gtcctcgcc cgccgcctc cgccaccgtg 180
 gtcctcgcc cgaggcccc ggcgcccgcc cccaccagcg ctcctcgcc cgcgttcccg 240
 gccgtcgcc cggtgctggg cgctccgtg ctctcttct tcgctacta cctgcagtaa 300
 aattaaagga ggatcggagg gagaggctgc tggctgcat tgcctgtatt cggttgatt 360
 ccgtttatat atatatttaa gtactttaat ttgggtctga acatgtcgat tgatccattc 420
 attttatttg 430

<210> 2004
 <211> 414
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-C2
 <400> 2004

gtgggtcgac ccaagcctct acacagactc gtgctaacgc gtccgggcaa ggatgtcga 60
 cggaagcta ggaccaggct gccggagtcg cctgatcta gcttctcagg aactccgaat 120
 gccctggatc ctageccaatc atcctccttc cctttgaat ggttgctagc ttctcaagaa 180
 ctccgaatgc tctggatcct agccaatcgt cctccttccc ctttgaatgg ttgctagctt 240
 ctaaggaact tcccattaat aaattgatga ttattttgtc attggtgata agtcacagga 300
 aactaaccaa aacagaaaca actgattttc cctaatttt gtgtttcatg cacagttttt 360
 taaatctacg gtggatgttt cctggtaaaa gtattgtgtt ccttgacaat aatg 414

<210> 2005
 <211> 391
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-C5
 <400> 2005

acaagcctct agtgtgagtc gtactcatcg cgctcggtccc gcgatgggcc tgttctcatc 60
 ggccgctaag agatgtagaa agtgcaagaa gttcctccgc agcgcgggcg cgtgctgctg 120
 ctgcgctcg gctcctccg cccctgctgg tgggtgtcgc ggcaacgaag aggcgtcgac 180
 gtcggcgctg gcttccgcgc cagatggcaa gaaaaagaag aggtggagga agagaaagtt 240

ctggagaaaag aagaagaagg ccaagaagga gagcgacgat ggcagcggcg agctcgtgga 300
tctcgtcaac agcttctcgg ccaagtccga cgtgtgcaag aacgtgaatg cggccgagga 360
gattctacgg ggctgcaacc agaacatgcc c 391

<210> 2006
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-C6

<400> 2006

tacaagcctc tagactgagt cttcgtagac aataatggcg cctctcctgg cgtcgatgct 60
gctcgtcggg ctcgccgtgg gctccgagga ggaggaggac ggcggcggca aaaagaagcc 120
ccacgtcaac cacggcaagt ttaaggcgga gccgtggacg gacgggcacg cgacgtacta 180
cggcgggcgc gacgggttaa ctgacaccac ggacggcggc gcgtgcggct acaagggcga 240
gctggggaaa gactacggca ccctgacggc ggccgtgggc ccgtcgtgt acaccaacgg 300
caccgggtgc ggcgcgtgct atgagctcaa gggccccaag ggcaccgtgg tggtagcggc 360
caccaacgag gccccgcgc c 381

<210> 2007
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-C7

<400> 2007

tacacgcctc aacacagatt cggaaaaact gtttcaaadc tgtgacataa tgatttaggg 60
agatagctca caccttttac accatgccaa cttttaacag tactttgcat atacattttt 120
taatttgcca acccgacgct aattaaatct gtccacaaca atgtgacctg ggacgacatt 180
agatcgagca acaagggtcaa ttgatctagt ttcactcgga cactgactaat tcatcgccat 240
cgcaaccact tgtacgggta ttatgtatgg aagaagagcg tgaataaaac actgacgagg 300
atcagctcga gtgcttact gaacaagcca ctacttgagc ccagtgcctg agccttgtct 360
tcacaagcag aggggttatct cctgggttgc aaat 394

<210> 2008
 <211> 374
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-C8

<400> 2008

atacacgcct caacaccgag ccatgacaat gacaatagcc gccgtgctct gcctgctcct 60
 cttctctggc cgtctcgccg cggcggagaa gactttccgc ggaggcggag gcggaggcta 120
 cggcgggttg gaggcgggtg gcggaggcgg cggcggcggc tactccaccc cgagcgaggc 180
 agcgccatcc acgcctgccg ctggggagac gacgaccctt tcgtcaggcg gcggttactc 240
 cacccttagc gaggcagcgc catccacgcc tgccgctgag gagacgacga cgactccttc 300
 gtcaggcggc ggggggttacg gcggtgcaac cggcaaggct tcctcaagcg gcggcgggct 360
 ggaccccgac ggcg 374

<210> 2009
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-C9

<400> 2009

ggccgacaca cgccaccaaa gaaaggcgcc tgagaacaag acggatgctg ctaattgacg 60
 tttcagctcg tttgtttgtt cgtcccttcg gtttggcact gatgcttatg acccattggt 120
 ctgccattgc aattgaaatg tggttggaac gtgcttgatc gggaaactaac atgaaatgag 180
 tgaagggtag atgctgatct gaaaaaatatg tgtgttcccc cctctttcct tccatgtcgt 240
 gttgttgacg gtaaccgtca caatatatat aggtggcccc ctttggaatc cggggattat 300
 tccgtttgct gtattttttt ctgtgaaaat gaactgattc ctgtcaattt tctatatgat 360
 ttatgattca tctgaaattc ctgagaccga tgttgaat 398

<210> 2010
 <211> 282
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B3

<400> 2010

ctctccgcgc cggcggagac tgcgaaggcc aaccactccc agccgccgaa taactcgggtg 60
gaagagcgac ggattcagat tgctcgtttt aatgccctga agcagcggca gtcctcaag 120
caccggcggg atcgggagct cgccgtcgcc acggcggcgg cgtggggcac cagtgttget 180
gggtctcatc gtgccgtgc cgccgccgcc ggcggttacg gtgcgccggc gccggcgccc 240
gcgccacgtg tcctgagctc gtacgcgtgg cccccgtac ag 282

<210> 2011

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D1

<400> 2011

caagcctcta tatagagtct tattatTTTT tttggagcaa gcaagcagat aaaataatga 60
aatactcgtc acatatgcca tggctggcat atcaagcggc gcaggtgaaa caaagtcttt 120
gtggtagcat acagcatgct acgcacgaag gtactactac ataccgcata acttgagcga 180
atacaacaag caaaccatag gcaagccccg gaatgaaagg aaacaagggt acaaagtgtg 240
cgccccaaac cacccttact cgtcttggat ggctctctcg tcctcatatt ccgcctctc 300
atcagcagtg gcatcctggc actgctggta ctcgacacc agatcgttca tgttgctctc 360
agcttcgggtg aactccatct catccatgcc ctacgagtg tatcaatgca agaaaacctt 420
tc 422

<210> 2012

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-H7

<400> 2012

cgcgggctga cacacgcgtc aagccgcact ccctctacgc ctcaaggctc tcctctcgga 60
ggtctgatag gcaacccaat aatggcagaa gtcctatcag gatctcatga acaccgtcta 120

agctctgcct tagatggaca ctacgacgag aagaggaaat ccaatgtgga atacacagag 180
gacgagaaga aagccgtgat cgcggctctg aaaaagaagg ctttgagcgc ctcacagaag 240
tttaggcatt ccatgaagag ggggaggaag agcagcaagg tgatgtccat ctcgattctg 300
gatgagcgtg aacctgagga ggtgcaggct gtggatgcct tccgccagct tcttgacttt 360
gaagagctgc taccatcgca gcatgatgac gtacacatga tgcaaagatt tctcaaggca 420
agaaagtttg at 432

<210> 2013
<211> 294
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-H9

<400> 2013

cgtattaaat ctgcacctct agcactcgac tggggatcta ctaaacctgc aagcagacgt 60
gaatccttcg gatctggtac tcgaataatg cagtgcattg ggactcgatg ttgtagcagc 120
agttgaccac aagccgcgag catctcacag tatgtttgat gtcaattcgt caggggtggga 180
gctggcactg ggcactgctc caagcactca aattatccag gcagttgaga caagattggc 240
tggaggcttt gacgagctgc taattaacag gatctacaaa gactaggcca gtag 294

<210> 2014
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-A10

<400> 2014

tacaacactc tagagtgagt catgctaate acatggttgg gaagctggca ttagtctccc 60
ggagttagct tagctgtggg gtagtgccga gaattgtctt ggaagcactt cctgctgttt 120
ttactattcg aaaagaagca aaaggcaaaa gctatcgata taatagtgag tgaatgcagt 180
taatagggat aagggctatg acggtattgt gctcgagtcc tggtaagat gggctattta 240
tgggtgtgctg gatgaccaag agctacgtta catggcactt gaatttgta agcagctggg 300
agaggttttg cattcagtca attccaaaat caagtagcca ccatttgga ttaatttatg 360

ttattccagc tccaagaatg caaaagctca ataataagga ctttggaccc aaagatctca 420
 tgcattctggc t 431

<210> 2015
 <211> 439
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-A11
 <400> 2015

gttacaactc actagactga gtcgtattac aggaggcgag ggtgcaaggt ggcgccggag 60
 cccaaggagc tggaggaggg gaccgccgag ctcccgctga tgcccggtc gccgagcttc 120
 aggtactact gccagaagaa gacggcgccc gtcgatagga tcgtggctga tgccatcgac 180
 gccgatgaca ccgtcaggat cagagcgacg gcgcgacagc tgagcaatag gagcgaaatc 240
 acggcaaaca aggcacagga ctccaacgag gtctctcaac ctaaaggggg gaccaaattg 300
 cttaggttca gtggcttgtc gatcgctcgt gccgcttggc acaagcacia cttgttcagc 360
 cgccaaagaa gcaagccttc gccgcctcct gctgccgctt cagatgcaag ctcccaaacc 420
 tgattaggca gcgctatat 439

<210> 2016
 <211> 241
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-A2
 <400> 2016

tccagcttta agaagctgcc gcctgttctt gtcacatgat gaatcaacgg gatggttctt 60
 gtggatattt ctgcttaacg tggcattagt ggtggatatg aatcttactc catggttgat 120
 ggggatgaaa ctctcatatg gagtctgcag actgcaagta atgaggggtga gcatttgatg 180
 gttgatgttc ccaggaagca gggccagcgt tgccagtttt tttggcacga aagagtaaatt 240
 g 241

<210> 2017
 <211> 357

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-A3

<400> 2017

cggtcgcccc gaaaaccaac cgtctccgtt ccgttcacct tgcaagcata tccacggcga 60
 tggaggcgaa agcggccatg acctggtact gcgggtccct tctggccgtg gccatcgcg 120
 tgttcctgtc cgtgtccctc ggcgtgcgcg ccgccggcgc cggcgccggc gttgacatca 180
 aggtgtcgtg tgcagcgacg ccggaccggg acgtgtgcct gcgcgcgctc caggcggaca 240
 gcgactccaa gaccccgcg gacctggcgg aggcggcgct ccgcgcggcg acgaccgcgg 300
 gcggcgcggc cggcgactac gcccggcacg agatggacgt ggttaaggac aacgaca 357

<210> 2018
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-A4

<400> 2018

gaccacgcc tctagcgaga gtcctgttat catcggccgc taagagatgt agaaagtgca 60
 agaagttcct ccgcagcgcg ggcgcgtgct gctgctcgcc gtcggcctcc tccgcccctg 120
 ctggtggtgt gcgcggcaac gaagaggcgt cgacgtcggc gctggcttcc gcgccagatg 180
 gcaagaaaaa gaagaggtgg aggaagagaa agttctggag aaagaagaag aaggccaaga 240
 aggagagcga cgatggcagc ggcgagctcg tggatctcgt caacagcttc tcggccaagt 300
 ccgacgtgtg caagaacgtg aatgcggccg aggagatcct acggggctgc aaccagaaca 360
 tgcccagcag ggcgctgacg ttcagccagc tgggcgccgc gaacg 405

<210> 2019
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-A5

<400> 2019

gccggccgat gcacgaatct acagtgacgt cgtactatcg cgtccgcgga cgcgtgggtt 60

ccagaccaac ctggtgccct accctaggat ccacttcatg ctttcgtcct acgctccagt 120
catttctgct gagaaggcct accacgagca gctgtccgtg gccgaaatca ccaacagcgc 180
cttcgagcca tcttccatga tggccaagtg cgacccccgc catggcaagt acatggcatg 240
ctgcctcatg taccgtgggtg atgtggttcc caaggacgtg aacgctgctg tggccacaat 300
caagaccaag cgcaccatcc agttcgtgga ctggtgcccg actggcttca agtgccgaat 360
caactaccag cctcccaacg tcgtccccgg gcggtgac 398

<210> 2020

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-A6

<400> 2020

acaagcaact agaataaggc catgtacgtg gtggaccca gcggaaggcg cgactacacc 60
aacatcaccg cggcgctgga ggatatcccg gtgagcaaca ccaagcgcggt gatcctggat 120
ctcaagcccg gcgctcagtt ccgcgagaag ctgttctga acatcagcaa gccgttcac 180
acgttccggt cggaccccaa gaagcccgcg gtcgtggtct ggaacgacac tgcggccacg 240
aacggcaagg acggcaagcc ggtgggcacg gtggggagcg ccacgctggc ggtggagtcg 300
gactacttca cggcgtagcg cgtggtgttc cggaacgacg cgccgctggc caagcccggc 360
gc 362

<210> 2021

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-A7

<400> 2021

tcaagactga gtcgtatcac cctcgtggcg ttgttgtctg ccggcctctt cccgcaggcg 60
ttagggaacg gcaagggcaa ggtgcatggc ggcggtgccg tcaaccgct ggttgccggc 120
atctgctctc gcgccccatt cccagaggtt tgcacggcca cagccgggcg ccatgcatcc 180
aagtaccggg tcatcgacaa tttggccgtg ctgaacatgc acgtggccgc gttcgccaag 240

cgcacagcgc aggcgcggaa gcacgtcgcg gtggcggccc gcactattcc accgccgcag 300
gcacaggccc tcaggacctg cgacacgatg tacatgaaca cgcaggacgc catcggcgcg 360
gcgc 364

<210> 2022
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-A8

<400> 2022

acaagcctct agactgagtc ctctactcg cggcgggtgct cctccctct tegtcccca 60
gcgacgcagg caggcgcgcg cgcgcccatg aaggggggcg gtgccatgag gccgtcgcct 120
atgttctacg tccacgaggc ggacgtcgtc cagatccacc acttcctcga ggagtgtctc 180
ctctgcgcca aatcgctctc cggcgacatc ttcatgtaca ggggtgacac gccgttctgc 240
agcgaggagt gcagggagca gcagatcgag gtggacaggg cgaagcaccg gcggaagaag 300
cgcgcggcgg cgcacgcgct gtccgcacgc agcaggagc accggcacca gcagcagctg 360
cagcagcacc accaccagca gcagcaaccg cagc 394

<210> 2023
<211> 248
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clóne ID: LIB148-046-Q1-E1-B10

<400> 2023

agtcgtatta aacncgcgca cttggcgctg gccctcgata tcggggagtg catgtcgttc 60
ctcgtcaccg ccgaccagaa gcccggcgac gacgtgctgg ggggtgccac cctgttcac 120
aaggctcgtga acagcatcag ggccgtgatc tgctacgggg gctccgacac cgcgccgctg 180
gccaacgtgg cggccagtcg catcgggtgg gcgtcgtcca tgcaagcact gcaggtcctt 240
ccgctgga 248

<210> 2024

<211> 210
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-B12

 <400> 2024

 ttgcaactcc ctgacgtgag tcgtattaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagaa 60
 agaaaaaaga aagagcaaaa aaaaaaaagt aaacaagaca gaaacgggga aggcacatct 120
 aaagggctgc tagaggggtca actcacttga ggtccgtcgg ccgtcttctt ttaagggaga 180
 gtccctggaat tccctgacgt aagcgaattg 210

<210> 2025
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-H6

 <400> 2025

 attcgccggc cgacccacgc gtccaccac gcgtccgaaa gaaacaagcg cccacgaaca 60
 actacctgc caccaacaat ggctccagg tctccattg tactcgccac ggtgatgttg 120
 gctgcgtgt tcgcggttgg tttctgcacc accccgtca ccttcagggt cggcaaggga 180
 tccaagcctg gccacctgat cctcaccacc aacgttgcca ccatatccga tgtggagatc 240
 aaagagcacg gtggtgatga cttctccttt acgtcaagg agggcccgac tggcacgtgg 300
 acgtcgaca ccaaggcccc actcaagtac cccctttgca tccgctttgc tgtcaagtct 360
 ggcggtacc gcatcgccga cgacgtcatc cccgccgatt tcaaggctgg caccacctat 420
 aagaccacac tcagcatcta atcaacctct 450

<210> 2026
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-G10

 <400> 2026

 tcgtattaaa agtctccgac gcggcgtctg cggtgccgcc gctgcctcct ggtgtcgaga 60

ccgccagcag caacggtgcc cgcgggcgga gcgtggacgt ggaggataag cagcggcggc 120
acgacgacga ctgccacccc gaagtcgttc ccgataagat catacgggag gacgcaccgc 180
cagttgttgc agataccgct gccgccccca acatcacgga cgtggagggtg gagtccccca 240
agaaaggagc ggcgccggtg ccaaagccca tcatcgttgt cgccgcagtg gaagacgtgg 300
tggcggacaa gttcgtggct gtggtgaagg aggcgatcaa gaagccggat atggacgaga 360
acgaagtggc gatgcggaga ttctctgggca g 391

<210> 2027
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-G11

<400> 2027

caagcctctg acatgagtcg tctaagcct ccgtttgcgg tgcgacagct cctccaggac 60
cggccccgc gcgcgtgccg tacgtgccag ggacgacgcc gggcgggccga tggagtccac 120
gtcgtcctac ttccacgcct tcggcaacce cgacctcgcg gcggtggtct ccggcgacgg 180
cggcagcgcg caggccccacc ggccgcgcgg ctccaccgac ggcgcggaagg cggaggacgg 240
caggagcccc accaccacaa cggcgaggcg cgcgccgtcc atgttctgcg tccccgacac 300
ggaggcggag gagcccaacg gcttcttgga cgagtgcacc ctctgccgca aggcgctctg 360
cggcgacatc ttcatgtaca gaggggacac gccattctgc agcgacgatt gcaggagggga 420
gcagatcgac a 431

<210> 2028
<211> 391
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-045-Q1-E1-G12

<400> 2028

aagtgactca tactaaggng attcngtata tatttttcgga tccttgagca gactggacga 60
aaatcttggc atttccagaa tcagacttgc ttctggtgac gccagagatt gtcaagaaga 120
catactgttt gaagatcagg caagagctga tgcacgcct tccagctgtg acgagtcgag 180

tgggtgtagca agccttaaaa ttcagatttc tctggtgaat ataagactga gggcacttga 240
 agaggatcag gagttcctca atcaggtatt gagttcgctc caatgtggta ctgatgggct 300
 gcagtgtata caggagataa gcatgcactt agcagagttg cgaacagttg tggctcacta 360
 aaatgaaaat ggttttgccc cgagttcaaa a 391

<210> 2029
 <211> 268
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-G2

<400> 2029

actcctctat caagcttcat gctaatacggc gcgcgtctgc agttgcggcc agccatatca 60
 tggcgatgat cagcacgttg catgacgata gagccgcgat gcaattagaa gcactgcagg 120
 acctgagggtt aatcgaccag caggttgacc acgaccactt agccatagac gatctgtatc 180
 gttcgctcac acacacggac aactgggttg ccatcttgga cgccgtacct gcacactgcc 240
 tgtcgctcct gcgcaacgac gatccgtt 268

<210> 2030
 <211> 420
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-G4

<400> 2030

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 ggaacagcag gctgaccacg accacctagc gatacaggat ctgcatgatt tgctcacaga 180
 gagggagaaa gaattgctcg acttggacgc tgaacttgca cactgcagga ggctcctgca 240
 gaacgacgat ccgttcaatg gcgacagatt tgatggcact gattatacaa cgaacaacaa 300
 cacggatttt gtggggagcg ccatgtccca ttttgaagac gacaaggcat acattttgga 360
 atccttgagc agactggagg aaaatcttgg catttccaca atcagacttg cttctggtga 420

<210> 2031
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-G7

<400> 2031

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gatgatccgc gcctacgcac agtcggtggc gacactcaac ctgctccgcg cgttcgccac 120
cggaggggtac gctgccatgc agcgcgtcac tcagtggaaac ctcgatttca tggatcacia 180
cgagcaaggt gataggtacc gtgaattggc ccataaggtg gatgatgctc ttgggttcat 240
gactgcatcg gggcttacag tcgaccaccc gataatgacg actactgact tctggacctc 300
gcacgagtgc cttctcttac cctacgagca ggctcttacc cgtgaggatt ccaccagtgg 360
ccttttctat gattgttcgg ccacatggt gtgggttggg gaagcgaatc gacaactcga 420
tggacctcat gttgaat 437

<210> 2032
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-G9

<400> 2032

ccaatcctct gagctaactg cgtgctaact cgtccggtgc tgctgcttcc cctgcgtcat 60
gggtggaggtc gcggtgctcg ccacggtgcg cgcgcccgcg gcgctgtgcc gcaaggccgc 120
ccgcgtgcgc aagggccgca ggcgctctgc ctccgcgggc caggccacgg agatatatga 180
gctcctcgtg gacgacaccg gcatcgctga agtggttggc ggtgccgcca atgccgtggc 240
gctgcccgtg aaacccgcct tgcactctga ggaaaagggg gagctggaga aggaggtgtg 300
ggccacgttc tacggcaccg gcttttggag gagcccgtcg cagctggacg acaactacga 360
caggtgatcg ggacaggctc gcgagcgagc tatccacaag ctccctccggc gatgcgtggg 420
c 421

<210> 2033
<211> 408

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-H10

 <400> 2033

 gtcgtattaa gggacttccg ttccgtgcta gcgcgcgatc gcgtcggcct ccaactccacc 60
 ttcccgaaaa agcttaccct ttgtgtttgt gtgtctgtct ggcaatcgat cgatctccat 120
 gacgacgtcc ccgccgcgcg cagcctgct cgccatggcg ctggcgctgg cattcgctg 180
 cgtgctgctc gtcagggtccg cggacgccgc cagccccggc ggctccgcgt acgggtgcaa 240
 cccggccacg gacaggacgt gcaggcccga gggcgtcggg gtgggtgctgc ccgacggcgg 300
 cattgacctc gacggcgacg gcgacgagga cgagctgccg cagttcgacc cacacttcac 360
 gatcctcggc catgcccagt gagtgtgagt gcagggtgcag ctggctgg 408

<210> 2034
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-H12

 <400> 2034

 tgagtcgtat acctaagcag ctaccagcca gtccgatccg gctagagacc gtagacggcg 60
 cacacacctt tcatccaata catacatcta tctgagccct ttcccgcagt gaggccccgac 120
 cggagtccac acacacatcg tgtcaatcgc gggcgtaata aggagccgcc gccgcgtgtc 180
 cgttttcttc tacgtcgtcc tcgccgcagc tgcagctgca gccgcggcgc aggcattccaa 240
 taacgtcacc tccgacgagg agtactgggc ggagcgcgcc gaggtggctc ggtcgcgcaa 300
 cctcgccgcc tacgtcagcg acccctgggc cgccacgaac cgcttcaacg cggacgtgct 360
 gagggccacg acgcggcggg cgctggcgaa gtacgatggc ccgtgcatgg cgacca 416

<210> 2035
 <211> 340
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-H2

 <400> 2035

acgcgtccag tagagttcag ggcattgggt tcgactcctgt agttgacccg gtcgatagac 60
 cgtgatacga cttccccagc caaagctgag atcgacacatg tgatcaacca tatggtgcgt 120
 ctccgagtggt tggctgggta ggctcgtttc gaggggaacg tttttatggt agcaccactg 180
 tcgggcttca ccaaagagga ttccgtcgac ctactgcgg tgaggttcat tgcgctcacg 240
 agcctatacg gcacgcacgc cgatgattgt gtgcacaccc tgggcgattg ccatgtgtac 300
 tatgccgatg tacaacggta gaattagtga gacagcagct 340

<210> 2036

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-H4

<400> 2036

tcaggggtgtg ggccaagaga cccagccag tcgactcctc aagaaaaata ccagcttacc 60
 aacaacagca gcagcaagcc caccgcttcg acgacatggc ccgcctcggc gccggcgccg 120
 tgttgccgct cctagtggcg gtcgcgccgg tggccgcgtt cctcgcggtg ccggcctcgg 180
 cgaagtccgg ggagctgagc gcgatggggg tgctggcgcc gaagggcgcc agcggcgccg 240
 gccgcagaa gtgctcgggc gcggtggcg agtgcgacgt ggacgaggcg gaggagctcg 300
 ggctgagcgg cggcgccctc ggctccgacg acgcggtgcg gcggacgctg gcgcagcgga 360
 agccgaccaa ccggtacatc agctacgcgg cgctgcgcgc gga 403

<210> 2037

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-H5

<400> 2037

tcgcgggctg atacacgcct ctaaaatgaa tctgctaata ctggggccga gtcaaggac 60
 gatgccgcta ctatggaacg cgagccgctg gtagcagcag cagcagcacc acaagaagag 120
 aaggccaaag ctgaggagaa gacgacgcag ccaactaagg ccgtggaatc tgccaagtgg 180
 aggacgaagg atgaaggag gagcaacgaa gccacagagg agggcagggg caagtctacc 240

actactgctg ccaccagga gaggaagaac aaggtgatgg ccttggttgg gaggtttgag 300
 actgccatgt ctggctgaga agagatcaga acgaggtgat gtcaaaagac tgctctggct 360
 catgaaaatg tgtacgagta ctactcaact gtgcaggcgt ggaggggttcg tatgtgtcgt 420
 ttcattaatt aatgtggctg ttg 443

<210> 2038
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-E7
 <400> 2038

accacgcgt ccatcgaccg tcggaaaatc gacgaacatc ctgtggcatg agtgcgccat 60
 cgggcagaag gagcgacagg gtctgctgaa ccacaagggc tgcgtcgtgt ggatcactgg 120
 cctaagcgggt tcagggaaaa gcacgctcgc gtgcgcgctg agccgcgagc tgcacggcag 180
 atgccacctc acgtacgtcc tcgacggcga caacctcagg cacgggctga acagggacct 240
 cagcttcgga gcagaggacc gcaccgagaa catccgcaga gtaggggaag tagcgaagct 300
 gttcgccgac gctggcctcg tctgcctcgc cagcctcata tcgccctaca gaagcgaccg 360
 aagcgcgtgt cgcgatctgc tgcgcaagca ctcgtttacc gacgtgttcc tggacg 416

<210> 2039
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-E8
 <400> 2039

cacgcgtcta catcacgctt ctctcaccaa ataaggtccc gcccttttcc gacattcaca 60
 ggggggacag gaaatcagcg gccatggcct cgattccggc gacgaccttc gccgtcatct 120
 tatccgtcct cttctgtgcc gcggttgga ccgccgtcga caacgacctc cccgactacg 180
 tcatccaggg ccgcgtctat tgcgacacct gccgcgccg gttcgtgacc aatgtcaccc 240
 agtacatcgc gggcgccaag gtgaggctgg agtgcaagca cttcggcacc ggcaagctcg 300
 agcgtccat cgacgggggtg accgacggga acggcacgta cacgatcgag ctcaaggaca 360

gccacgagga ggacatctgc gaagtgggtct tgggtggagag cccgcgcaag gactgc 416

<210> 2040

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E9

<400> 2040

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ggcgttcccc ttcctccgct gctgccagtg gtggttggag atgacacata tgtttccaag 120

ggaaggtgcc tcatctagct caacctcaat gagcagccag aggagtgaag ctcattgatga 180

taggatgatt gcaatgggtc tctccgaaga atatgccaa ttagatgggtg ctatggccaa 240

gcgtcttact aatttaacat caattcctca tgttccccgt attaacacat actttccaac 300

atatagtgat gccactatgg accattatcg cctccttgat aggctaaatg catacggctt 360

gtttgaggtg agagtatctg gtgatggaaa ttgtcagttt cgtgcact 408

<210> 2041

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F1

<400> 2041

acgcgtccag acaaacttgc caagcagcta gcaaccaacc caagaaagct agacaccata 60

cccatggctc gcgctagcgt cgtcttcgtc attgctactc tcctcttcgt cgccatgggtt 120

gtggcaccga tggccgaggc aaagtccgct gatgccccct ccgccgacgc ccccgccccc 180

gctgctgacg cacctgccga tggacctagc ggaccggcgg gtgcacctgg tccccagggc 240

gtcgagggtc tatcgggcaa tgaggacgac gatgatgact ccaccaacta aggccaagca 300

cgtcgggtccg gttgcatttg gaacaagaca tggaagaaaa gtgagagcaa tgtcctttaa 360

aacaaaaagt ccataataat gtgtggtcat ccgtgatatg ttcttgctcc ccctcttttt 420

<210> 2042

<211> 440

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-F10
 <400> 2042
 gtgggtcggg ccaagcctct aaactgacgt tctgctaacg cgtgggaggg gagcacccat 60
 cagccaagag ctatccatac gcacagcgat gcaccagcac gagatactag ccatcatgcg 120
 cctgtcgtcc ctctctctcg tegtggccgc cctctcggcg cgcgccgcgg cgcagcaggt 180
 gccgccggtg ggccggcagcg ctctgaagcc ggactactac agccagtcgt gcccgcgcg 240
 ggagaggatc atcgcgaggg tgatgcagac gaagcagatg gcgaacccga cgacggccgc 300
 gggcatgctg cgcgtcttct tccacgactg ctctcgtcacc ggggtgcgacg cgtcgggtgct 360
 gatcgcgtcc acccagttcc agaagtcgga gcacgacgcg gagatcaacc actcgtctccc 420
 cggggacgcc ttcgacgccg 440

<210> 2043
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-F11
 <400> 2043
 caagaagcaa accagcaatg gcccgcgccg gcgtcttct cgtcgtgctc ctcttagccg 60
 ccgtcgccat ggccgcgttc gggggcgcg cgcgcacga cgtcgtcgag ggcagggtcca 120
 tggcgtccgc ggacgcaccg gaggccgccc cgcacgtcc cgtcctgct cctggccccg 180
 actcctctc gaccccgctg ccggcaccct ccagcagcag ctcttccgac tagccgccccg 240
 gcagagatat ctacggcgtc cgatcagtct ttggcgccac ctatgaccta tcggatcctg 300
 caaagctatg tatgattcta tggataatg tgtggttggc ggaaacgccc ggaaataatg 360
 tgcttgctg attggttttc tctctctttt tt 392

<210> 2044
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-F12

<400> 2044

ctctggagaa agtcgtcata atccgcgga tcacgtgct caacagcaag ttcttccacc 60

tcaacatctt cgagtgaag aacgtgctga tcgacaaagt gacggtcaag gccccggcg 120

acagcccaa caggagcgc atccacatcg gcgactccag caacgtgacc atcagcagca 180

ccaccatcgg cgtcggcgac gactgcatct ccacggccc cgggagcaag atgatccgca 240

tccatggcgt caagtgcggc ccaggccacg gcacagcgt cggcagcctg gggcgctaca 300

aggacgagaa ggacgtggaa gacgtgcagg tgacggggtg cacgatcgcc ggcaccacga 360

acggcctgcg catcaagtcg tacgaagact ccaagtcgtc gctcaaggcc aacaagttcc 420

tgta 424

<210> 2045

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-045-Q1-E1-F3

<400> 2045

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ccaatcctag cggttagcga tctctagttt atattacaat taggagcaag cgatccaatt 120

atcgatagag cgcgagatcg atcgatcatg ccgggcccgt cggtggtctc catcctctc 180

ctcctcctcc atggcctcct ctgctgcag ctggctgcct tggccgagat ggacgacgac 240

gacgtcatgg aggacggcag ctgcatgcat ttcagtgtgt ccccgccgcc tgetccgccg 300

gaggacgcgg atgagcggcg cgactatttc cgcgccatgc aggccaagga tctgttccgg 360

cacgagcaga tgatcacgat gatgggcaac gaccggaaac gcaacagc 408

<210> 2046

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F4

<400> 2046

cacgcgtcaa gagcctcatc ggcacgttcg atgagatcca agacggggcgc agcgggggtgc 60
 cgcccagcga cttccccaag tggctgccgg ccaccagcg gaggtcctg cagcagaccc 120
 agaagcctaa cacggtgggtc gcccaggacg ggagcggcga cttcaagacc atcaccgagg 180
 ccatcaccgc cgtgcccac accttcgagg ggcgcttcgt catctacgtg aaggccggca 240
 cgtataagga gtacgtcacc gttcccaaga acatggccaa catcttcattg tacggcgacg 300
 ggccgacaca gacggtgggtc accggcgaca agagcaacgc atgccgcttc gccaccttcg 360
 cctcagccac cttctctgct gaaggcatcg ggttcattctg caagtcgatt gggttcctca 420
 acacggcggg 429

<210> 2047

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F7

<400> 2047

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 aataagggtcc cgcccttttc cgacattcac aggggggaca ggaaatcagc ggccatggcc 120
 tcgattccgg cgacgacctt cgccgtcatc ttatccgtcc tcttctgtgc cgcggtggc 180
 accgccgtcg acaacgacct ccccgactac gtcattccagg gccgctcta ttgcgacacc 240
 tgccgcgccg ggttcgtgac caatgtcacc gtagatcatc cgggcgccaa ggtgaggctg 300
 gagtgaagc acttcggcac cggcaagctc gagcgtcca tcgacggggt gaccgacggg 360
 aacggcacgt acacga 376

<210> 2048

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F8

<400> 2048

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 gctgttattt ctaaaggagg acaggcgatt gcggtttcaa gggatcacia acctgatcag 120

acagatgaga ggcaaagaat tgaggatgca gggggctttg ttatgtgggc tgggacatgg 180
agagtgggtg gcgttctcgc tgtctctcga gcatttggtg ataaactctt gaagccgtat 240
gttgttgctg accctgaaat caaggaggag gtggctgaca gctccctcga attcctcatc 300
cttgctagcg atggactctg ggatgttgtc actaatgagg aagctgttgc catggtcaag 360
cctatccagg acccccagga agcagcagac aagcttctcg aagaggcttt cccgaaggga 420
aactccgatt acatcacag 439

<210> 2049

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F9

<400> 2049

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ggaagggtc cgcgctcgtgt cccttctctt cctcctcctc ctctcctct ctccaacacc 120
ccatccatca gcgctgccct ccgcattgct cttgatccca tccagtacat cgattctccc 180
cccaagatca aaggccggag gaggaagaaa ggtagggag tcggccatgg gatgcttttc 240
atgctgctgt gtggcagatg acgacaacgt tggcaggagg aagaagcatg acgatcccta 300
tgttcctatc cctgctcatg ttataattt tggacctagc cggttcccag ccccaacccc 360
tgtcatctcc actggcagag ctccagcctaat tgcagtaccg gccattcatc tggaagagct 420
gaagg 425

<210> 2050

<211> 336

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E4

<400> 2050

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ccttcctccc cgcccagggc cgctccgcta acgtcaacgc cctccgtcc tggctcccc 120
gccgccgttc tctcaaattc agcgcgacca acggtgacaa ttccctcccc aatcccatct 180

ccacctctcc cacctcgccg ccttggttaa cggtggtgga cgttaacggg ttgcgtcgcc 240
 cgcccgcgcc tggttccgcc cctaccatcc cgggggacgg cgggtccccg tggctgcctc 300
 ggccgttcac tagcgcggaac gtcattggggg cggatt 336

<210> 2051
 <211> 415
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-C8
 <400> 2051

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 ggaactgcct cgccgacgag agccacgtgt gctggaggaa cggcaagttc gcgcaggaca 120
 tgatcctccg gctcaggaac gtcgagagcg gggagataca gctgcagctg cagtgggtga 180
 acttccctcc tggtcctgct cctgctgctg caacaaccag gtgacctgat cgatggtagc 240
 tgctgttcct gtcgccattg cctcctgctg gcaggaacag gaactctctg aagcacgggg 300
 tcagggtagt tcatgttgct tcgattcgat cgtaggggag ataatgccgg atggctttgt 360
 aaagtttggg aggacatgca tcataattga agtcaagtga taggatcctg ttttt 415

<210> 2052
 <211> 115
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-C9
 <400> 2052

cgtattaggt aggatggcgt tcatcatcaa tgtcgcagtg aacgctgcgg ccgtggctgc 60
 gctgctgctg gtctcagcgg tgtcgcctgt cgcgctcgct gggggggctg ctgtg 115

<210> 2053
 <211> 297
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-045-Q1-E1-D1
 <400> 2053

cggatctatg atgtgccctt gcttgattcg ttattgggtc tctagccaag aagatgaaga 60
acaacaacaa caacaaaaat atatatatgg tgctgcgtat gccattgta acagttgatg 120
agatctgtga ctccccgtgc cgtgtcccggt gagttgctga tgatttcac ccccgccccc 180
accgggncca acacacacac acttttttta atctttcccc ttaatatggg gtcccaaatt 240
gatgcggaga tctcgagcga ctctgcaaatt ttcagatgag tggacatatg tcgaagg 297

<210> 2054
<211> 433
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-045-Q1-E1-D10

<400> 2054
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atttcagaag agaactagct actccgatca agatgagcga cgaaggattg tacgtatatt 120
gctgagagga gatcgaagag acggtgatga gttggcgga gatcgatgca tgcgtggatg 180
atcatcacag ccaatcgta gtgtgtaaaa ggtcngccgg aggggggaat aatcgtgcat 240
gagacacctc tctcgctcgc tcttctctc ctacgtctta attcattggg ttcgtcgatc 300
cgagatccta cgtacgtcgt cgtttttgta ttgtatatat tataggatcat catctcgtgg 360
gggtcatcag atctggcggg ttggtggtgt gttgtaattt gtaaagagat cgatcaaggg 420
tgatgcggtg tgg 433

<210> 2055
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D11

<400> 2055
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gccgatgtcg ccaacgccgg ccacgccaag cccctgacgc ctggcgggcg tgtggtacac 120
gacaaccacg gcaagttcac ggccggggcg tggaaaccg cccacgcgac cttctacggc 180

gggcgggacg ggtccggcac cacggcgggc gcgtgcgggt acaaggacac gcgcacgcag 240
 gggtagcgcg tgcagacggg ggccgtgagc acgggtgctgt tcggtgacgg cacggcctgc 300
 ggcgggtgct acgaggtgcg gtgcgtggac agccctagcg ggtgcaagcc cgacgcggcg 360
 gcactggtgg tgacggtgaa cgacctgtgc cccgc 395

<210> 2056
 <211> 401
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-D12
 <400> 2056

cgtatgaagg acgcgccgcc agttgttgcg gagaccgctg ccgccccac caccacggag 60
 gtggaggtgg agtcccccaa gaaaggagcg gcgccggtgc cagagcccat cgtcgttgtc 120
 gccgcagtgg aggacgtggg ggccggacaag ttcgtggcgg tggatgaagga ggcatcaag 180
 aagccggaga tggacgagaa ggaggtggcg atgcggagat tcctgggcag ccgggtgaag 240
 acagcgatgg agccgcggtc agagtcggag cagccgcggc gccgggaggt ggctcggatc 300
 aacgacgtga tcgaggcggc acgcaccaag ctgatgcaca agcgccagtg cagcagggtc 360
 aaggcgctcg tcggcgccct cgagactgtc atagacaccc a 401

<210> 2057
 <211> 391
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-D4
 <400> 2057

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 gccgtgctag cggtagccgc cgatgtcgcc aacgccggcc acgccaagcc cctgacgcct 120
 ggcgggctg tggtacacga caaccacggc aagttcacgg ccggggccgtg gaaacccgcc 180
 cacgcgacct tctacggcgg gcgggacggg tccggcacca cggcgggcgc gtgcgggtac 240
 aaggacacgc gcacgcaggg gtacggcgtg cagacggtgg ccgtgagcac ggtgctgttc 300
 ggtgacggca cggcctgcgg ccggtgctac gaggtgcggg gcgtggacag ccctagccgg 360

tgcaggcccc acgcggcggc actggtggtg a

391

<210> 2058

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D8

<400> 2058

acacacgcga ccagtggaat tgcacgacga aactccgtca cgtcattcct ctgcgcctcc 60

cgtctggccg tcttcagac gtctccaatc ggagctccca gcgtctcgga gaagaggagc 120

agcacggcac ggcggtgtg gcgaggaagg ctctgtcct gtcccatccc aaccagcag 180

ccgtccaagg aggaggagat ccaatcggcg tgcaggcgtc caccgtccat ccatcgatcc 240

aattccaatc tgcaggcctc tgcgtcgcgg cttgttcgtg gaggagaggt tgctgtggaa 300

cccgccgcca gttagccatg tgcgtcctcg tgctgagggc tgcggccgac agggctattc 360

gcaggcacgc cctcacgtg acggacgccg cggcgttcag gatccgggag ctctcagcc 420

tcagggc 427

<210> 2059

<211> 232

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E2

<400> 2059

tggagccggt catggcgccg tgcgtcctc tgccgcggag cgccagcgag ctaccggacg 60

cgccgtcagc gttcatctcg aacacggcgc agtaccgcgt ctccgtgcc accacgtgct 120

aggttgctcg tatgttgctc gtcgttcggc cacatggtga gcccggccac ccacacatcg 180

ccgatgacgc ccagcagaaa gcatgaccac aagcctaagc cgaggccgga cg 232

<210> 2060

<211> 426

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-045-Q1-E1-A9

<400> 2060

cctctaaact gacgtcctag tactttttca tgggtggggtt cgccccgctg acgtcccgcg 60
gctcgcagca gtaccgcgcg ctgaacgtgc cggagctgac gcagcagatg tgggatgccca 120
agaacatgat gtgcgcggcg gacccgcgcc acgggcggta cctgacagcg tccgccatgt 180
tccggggcaa gatgagcacc aaggaggtgg acgagcagat gatcaacgtg cagaacaaga 240
actcctccta cttcgtggag tggatcccca acaacgtcaa gtccagcgtg tgcgacatcc 300
cgcccgtcgg gttgcccatt gcctccacct tcgtgggcaa ctccacctcc atccaggaga 360
tgttccgccg cgtgagcgag cagttcacgg ccatgttccg gcgcaaggct ttcttgcaact 420
ggtaca 426

<210> 2061

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-B11

<400> 2061

gtattactcg aaaccgagcg ccgcgcggca ctggaggccg cccctcagc cgccgccgcc 60
cgagacggag gaggcggggc gtcgcgggct aataataagc gcggagtccg cgccgccgcc 120
ccgccgtgct tggacgagcc gtcgtggacc atgttctgca acggcaagaa gaccgggtac 180
gcggtgcgaa ggcaggccac ggacgacgac ctgctgtga tggagacgct gcgggcggtc 240
tccatgggcy ccggcgtgct ccccgggagg gccgcccctt cgtcggcgcc cgacgtgtt 300
gctgcggcgg cagcggaaga cgaggtgcc tacatgcgcg gctgcttca ccaattcgtc 360
gggttccggg act 373

<210> 2062

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-B4

<400> 2062

attagcgttg cggctgttct tcgaccctg ccgttcgtgt cgattggttc gttccgccat 60

ggaggctctg atgaagcccg cgggtgtgctg tgcccatcgt gtgctgcgca tcgtcggctc 120
cagcgagtc ggtgtctatt gctcatgacg agagctgctg gaatgacgac gaccaccatc 180
ctatctgctt tcccgaagac tgcctggcga cctgccatga tcaccggcac tcagaccgcc 240
gctgcaactg ggcattggctg tggaggccgt attaccagtg cctgttggcg gactgccaat 300
aagctcgaac ag 312

<210> 2063
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-B5

<400> 2063

acacgcctat acacagacgt cctgcctatg cgattcctct cccctcgctt cctcgtctcc 60
ccctagggga tcgtcggaga ggaatcgcaa agagggccgt ctcattccgag ttaaggaagc 120
catggagcac aaggaggctg ggtgccaggc ccccgaggga cccatcctct gcatcaataa 180
ctgtggcttc ttcggcagcg cggcgaccat gaacatgtgc tccaagtgcc acaaggagat 240
gataacgaag caggatcagg ccaagctggc tgcctcctct atcgacagca tcgtgaacgg 300
cagcgacgcc ttcattggagc cggttgttgc tggcagcaac acagtagtag ctgttgccca 360
agttgagttg caaacaatga acgtgcagca gcccgctgat gttgccggac ccagcgaggg 420
ggtgg 425

<210> 2064
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-B6

<400> 2064

acactcctct agcttgactc gtagtacgac gagctgtgca tgctcacggt gccgcacggc 60
cacctcaagt cgtccaacat cctgctcgac ggccactacg agccgctgct gacggactac 120
gcgctgggtg ctgtgatgaa ccagtcgcac gccgcgcagc tcatgggtggc cttcaagtcc 180
ccggagcgga agcagttcgg ccgctcgtcc aagaagagcg atgtctggtg cctcggcctg 240

ctcatcctcg agatgctcac cgggaagccg ccgacctacg acctgcccaa ggcgggcgggg 300
 gcgggtgccgt cggccgaatc gttgtcgtca ccgcagaaac cgggtccggc ggcgggcaac 360
 agcactgacc tggttaccgt cgtggggctg acccgggagg gcagtggctg ggcaccgtgg 420
 tggacc 426

<210> 2065
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-B7

<400> 2065

acaaccctct agaataagtc ctattaacgg gcacgcagtc gtggtcgccc tggcctcgcc 60
 acggtgttct agtgcggtgg cgctgtgcct tggcgctccg actgccttcg tgggtgtagtt 120
 cgtggacggg aaccgaatgg cgctggggca attgctcgcc agacatgggtg taccgccgtg 180
 gtgtagttcg gcgacgggaa ccgaaccac ctcacccaaa tcaccggtat gcgttgttca 240
 cctgtgttcg cctaagactc aaaatacgta ggatcgtgcg ggtcgtgtgt cggttgccag 300
 gggacggttg tgcgtgcacc aaccatggcg ccgccggggg ctggaaagct ggagctccgt 360
 cgagctcgag aattttgcaa acatgacacc atctacggag ggcttcaaac tttt 414

<210> 2066
 <211> 382
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-045-Q1-E1-B8

<400> 2066

acaatccact acacacactc ctaataatct caagagacca gaaaactggg cactagtttg 60
 agaaagggaa naatacaatc cacaattccg ggatttttcc cttacggtgt cacctgattc 120
 catcaattta gttcctgagc atgctgcaac aaataaaaaa gtgttcctca tgaacctctc 180
 tgctcccttc atctgtgagt ttttctgtga tgcnaagag aaggtcctcc cgtatgctga 240
 cttcatcttc ggcaatgaaa ccgatgcaaa aatcttcgcc aaagttcgat gatgggagac 300

agagaatgtc gaggagattg ctttgaagat ctctcagctt cctttggctt caggcaaaca 360
aaagaagact gcctgtatta ct 382

<210> 2067
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-B9

<400> 2067

gagtcgtatt acgtcttcca tggcctcttc gtagtagaat agctctatct caccgcaaca 60
actcctcatt acatccttta tgagaggctg atcgattggt agatacgtac tcgggtggag 120
cagaacaacg agagacatgg cgacgacgac gcgtgttgcc gccaccgccg ccggcggtgct 180
gctggctcctg tcggcggttg cgaccctggc gcggggccgag gacccggtacc tgttcttcga 240
gtggaagggtg acgtacggga ccaagtcctt gctgggcgtg cccagaagg tcctcctcat 300
caacggcgag tttcccggcc ccaggatcaa ctgctcctcc aacaacaaca tcgtcgtcaa 360
tgtcttcaac cagctcgacc atccgctcct tttcacctgg aacgggatgc agcac 415

<210> 2068
<211> 456
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-C1

<400> 2068

accggtctga tgatccgggc ggccccacgc gtccacatgg tccaagtgat cttgccaagt 60
tacgagcagc aagcagagat cagatcatcc atcggaatg tcgaacatcg ggcagtcctt 120
ccaggccggc aaggcggagg ccaggggcga gtaccaggcg gagcacgcgg cgcagtgcgt 180
caaggacacc gccggagccg cggccgacag cgcgagctg cagcagcacc gcgccaccgg 240
caccgttgag caggtggcgc agacgggcca gggcgtggcg gcaggcgta aggacacggt 300
ggcgggcgcg gcggttggcg tcaccaacac ggtggcgggc gtggcggcgg gcgtcacgaa 360
cacggtgacc ggcgcggtgg cgggcgtcac gaacacggtg accggcgcg cggcgggtgt 420
caaggacacc gtgaccggcg gccactgatc gacgac 456

<210> 2069
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-C10

<400> 2069

tccggcaata tcgggcgcca gagatcattc taggtgcagg atactcgttt tctgttgaca 60
 tgtggtcctt cgcattgtatt gcttttgagc tcgcaacagg agaaatacta tttacaccca 120
 aggaaggcca tggatacagt gaagatgagg atcacttggc tttaatgatg gaactacttg 180
 gcaagatgcc gaagaagatt gcaaccatgg gaacacgac aaaggaatat tttgaccgcc 240
 atggagatct gaagcggata cgaaggctga aattgtcatc cattgaacgt gttctcgttg 300
 acaaatacaa aattttctgaa tctgatgccc gggaattcgc caattttctt tgccctttac 360
 tcgactttgc accagagaag aggccaacag ctttagattg ccta 404

<210> 2070
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-C12

<400> 2070

tcataatatg ccagatgtac tgagaaaggc tgatattcat aagattcagg cagagcttgt 60
 gtcattgtctt ccgtcgttac ctcacctttc agatctacaa aagctgaagg atgagctgaa 120
 gacctcttgg aattctatgg aggttcttcc atctctgtcc cgttggcatc tcttggagtt 180
 actcgcaaat tgtctgccac acagatttac ccatcccaat gaaacaagtt tgtctgttct 240
 tcaaagcatg aaggaggatc tagcaagcct gattgcaccg caactgatca gaccaattgc 300
 gcggtggcca ttctatgcct tcttgggagg agccatgttc tgcctcctgg ccagcagcac 360
 ttgccacctt ctctcctgcc attctcgccg cctagcatac attatgcttc 410

<210> 2071
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-C2

<400> 2071

cacgcgtcca caaaagcatt gaagccgtag ccgccgccgc cggacgagac aggttgagggc 60
ggggcggcaa tggccgccgg ggaccttgag gtgctcaccg cgctcgacac cgcgaagacg 120
caatggtacc acttcaccgc catcgtgggc gccggcatgg gattcttcac cgacgcctac 180
gacctcttct gcatctccct cgtgactaag ctctctggcc gcatctacta caccgtggag 240
gggtccgcga cgcccggcac cctcccgcgc cacgtgtccg cgtccgtcaa cggcgtggcc 300
ttcgtgggca cgctgtcagg gcagctcttc ttcggctggc tgggcgacaa gtcggggcgc 360
aagaaagtct atggcatgac gtcctatgcc atggctctcg gctccgtcgc gtcggggctc 420
tcgttc 426

<210> 2072

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-C4

<400> 2072

acgcgtccac agacgcgtgg gggcctggtg aacgaccgcg agatccgttc cgtggcggcg 60
atggtggccg ggcacaaggt ggccttctac cactgcgcgt tctacagccc ccaccacacc 120
ctgttcgaca gcgccggccg ccactactac gagagctgct acatccaggg caacatcgac 180
ttcatcttcg gcagcggcca gtccatcttc cagtgcgccg agatcttcgt gaggcctgac 240
cggcggacgg agatccgcgg ctccatcacc gctcaggtgc ggcaggagga ggacagcagc 300
ggcttcgtct tctcaatgg caaggtgtac ggcgtccgtg aggtgtacct gggccgcgtc 360
accgcgccgg actcgcgcgt catcttcgcc gacacctaac tctccaagaa catcca 416

<210> 2073

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-A8

<400> 2073

acaagcctct aatgtgagtc gtagtacgca tcaacaatcg ccgagagcga tcgagagata 60
aataaagatg aagaaagtgg catcatcgtc agccgttctc ttcgtgctag cgctgacgct 120
agtttgtgcc ccgctgatag cagaggcaaa gaagaagaga gtcgccgccg ccgccgccga 180
ggagaagaag gtgcaggaca acttctgctc gacgctgtgc gagggcagga aggggatgga 240
cctggtggtg tgcaaggagt cctgcgacct ctcacagcgc tccaacctgg tgctgtacgg 300
ccggatccag tgcaagggca agtgcaccga gcagaagggc atcaccgcgc cgcagatgaa 360
cgtgtgccaa gag 373

<210> 2074
<211> 284
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-044-Q1-E1-H10
<400> 2074

ggtcgacgca cgagtgtaat cgccgtcgtc gtggggcttc acttctccta gaacgccgaa 60
ggccaagaag agaagaaggc gagacgtgca gtccgtcagg cagcgctcga taagagggaa 120
gcaggaggag gctagacatc gaactcatca acgaaccaag tcgtacgtcg tgctcatcat 180
cacgtgacgg cgcgtgccgc gtcaagctaa gtgtccagga aggggcactc cgcagcgatg 240
acggtggtgg aggagtccgt ggggaagggtg gaggacactg cggt 284

<210> 2075
<211> 415
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-044-Q1-E1-H11
<400> 2075

tcgcgggtcg atacacgcgt ctaaagtcag tcatgctcag gaggaggctc tctcctgtcc 60
tacctgttcg ctcccggctc cctccatct ctttcgccac acgcgcgaga gggaggagag 120
gaaacagcta gcagcgagcg aggaacgaag aggggtgcttc gcacgtgcat gcgagatcga 180
tcccgatcgt cggccggcgg gaattgaact agcgacgacg tacgtgcgac cggggcgggc 240
gttgatttaa ttattccggc ctgagcaatg ggcaagatcg agtacggcgt ggtggcgcg 300

ggcgcggtgg tgctggcgga gcactacggc gcggcgggcg cgggcggcaa cgcgggcgcc 360
gtggcgcggc aggtcctgga ggcctccct ggcgggcggc acgacgactg caacg 415

<210> 2076
<211> 244
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-H12

<400> 2076

ccggcaacca ccggcttccc tctccgtccc caaccgaccg accaacgcgc cgagcgaaga 60
tgctgtggca gacgtacgtg gacgagcacc tgatgtgcga tatcgagggc caccacctca 120
cgtcggcggc catcgtcggc cacgacggcg ccacctgggc tcagagcacc gcattccccg 180
atttcaagcc cgaggagatg gctgccatca tgaaggattt cgacaaccgc gggaacttcg 240
cccc 244

<210> 2077
<211> 62
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-H3

<400> 2077

tctcatacaa gccagggcct caccaggatg gtcattgcaa ttatcactgc aagtactggg 60
ca 62

<210> 2078
<211> 414
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-044-Q1-E1-H4

<400> 2078

gcacaaccaa gctcaacaac agccagctcg cgaaaataat gaagagccgc agcatggcat 60
catcggccgc gctcttggtg ctagccctcg cgctagtggc ggccaccgcc ccacaggtag 120
cggaggcaaa gaagaagaga gcggcggaga gcggcgaggc ggcgaggcg aagaagatcc 180

aggacgactt ctgtctgacg ctgtgcgagg gcaagaaggg gacggacctg gtcgtgtgca 240
aggagtccctg cgcgctctcc cagcagtcga acctggtgct gtacggcagg atccagtgc 300
agggcaagtg caccgagcag aagggcatca cggcgccggc catgaaggtc tgccangagg 360
agtgcgacaa ggcgtacgtg gtgaaggcgg ccgaggttca caaggcctgc agcg 414

<210> 2079

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-H6

<400> 2079

cgtccaccct agcttgtctc tcatccatc aattgcaaga ggagcaagat accaccaccg 60
tagcaccaca cgcaggtacg aagaaggcga cgaacatggc gaggtggcc ttggtagcgg 120
cgggtggttct gtgccttcta ttagcgacag ggccgcacgg ggccgtcagc gccgatggga 180
tggtgtcatt tgacaatttg atcagctgca aggtactggg caactgcatg aagaacctgg 240
gccccgaggg ctcgcccca gggaaacccg ccaacgacta cccccgcggc tgcaaccgga 300
tcaccggctg tcgcggctga tcatatctct ctggtcgatg tgcgcgcaat gtcaatgtcg 360
cacgcgcgtg catgtaccag gccttagcgt gtggtgcgcg tgtgtgtata ttacacaca 420
tgcatata 428

<210> 2080

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-H8

<400> 2080

ggcgcaaaac gtcacatcc acaacctgca cgtgcacgac gtcaagcaca ccatgggagg 60
cctcatgcgc gactccccca cgcacatcgg ctcccgacc agggccgacg gcgacggcat 120
ctccctcttc tccgccacca acgtctggat cgaccacatc tccatgtcca actgcgacga 180
cggcctcatc gacgtcgtgc acagctccac ggggatcacc atctccaact gccacttcac 240
caaccacaac gacgtcatgc tcttcagcgc cagcgactcc tggccgcagg accagatcat 300

gcagatcacc gtcgccttca tccacttcgg caggggcctg gtgcagcgga tgccaagggtg 360
 ccgctggggc ttcttccacg ttgtcaacaa cgactacacg cactgggtca tgtacgccat 420
 tggc 424

<210> 2081
 <211> 193
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-A10

<400> 2081

ctccctgacg tgagtcgtat taatacagcc agcctccaat aggagcgagc cagtcaaact 60
 gatcgcactc tctccgccgc catcagagcg aacatgctga ctgaccccggt ctccaaggca 120
 atccgcagcc gacgtaccac caccaccggg ggagcgagat ggatatcaag atgatcctcg 180
 tcgccgtcct cgt 193

<210> 2082
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-A11

<400> 2082

tcgtcgggcc aagactctaa agaaagtcct ggcaatccag tcacggtgta catcactgac 60
 atgaactacg agcctatcgc tccctaccac ttcgacttga gcggcaaggc cttcgggtcc 120
 ctggcaaagc ccggggtcaa cgacaagatt cgccactgcg gcatcatgga cgtcagagttc 180
 agaaggggtgc gatgcaagta ccccgccggg cagaagatcg tgttccacat cgagaagggc 240
 tgcaacccca actacctggc cgtgctggtg aagtatgtgg cggacgacgg cgacatcgtg 300
 ctgatggaaa tccaggacaa gttgtcggct gagtgggaagc ccatgaagct ctcttggggc 360
 gccatctgga ggatggacac tgccaaggcg ctcaagggcc ccttctccat ccgcctcacc 420
 a 421

<210> 2083
 <211> 433

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-A12
 <400> 2083
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 cacaggatgg tatcacttgc tcggacaggg tggcttgctg ctgcattggg gcccatgcc 120
 atggccttct tcctgatgtg gaaacaacag gacgtacgcg ctctggtagc aggaacagcg 180
 atggttggcc tgagctcagg attcatcttc gccgcagcag tgtcagtgc ctccgagctc 240
 tttggaccaa acagcatcgg tgtgaaccac aacatcctga tcaccaacat cccgctgggg 300
 tcactcctct atgggcatat cgccgccatg gtgtacgacg cgaatggaca aaggatgaca 360
 ctgatggata atcgactgg catcattgac accatgattg tgtgcatggg ggtaaagtgc 420
 tactccacca cct 433

<210> 2084
 <211> 337
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-A4
 <400> 2084
 cagggtggcc tgctcttcaa gtacctgtaa aagggacaac accaagcaca cagcagaagt 60
 atacgatctc ccgaccgacc gtggacaata tcgaataact cctgccaaat cgccagttcc 120
 ttttgtgtac tgtgcgctag ccgccgcta gctgcactgc tgtatttttg tttcaggatt 180
 gctgctgctg ttgcattca atcgttgggc ctcccggagc cgccggaggc gcgttttact 240
 gttagcctta ctactcttac tccctgtagc tccacgtata agaaaccgat gtccctgcgtc 300
 tggcaatttg tcgtagtccc ttgatgatgg cgatgat 337

<210> 2085
 <211> 359
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-045-Q1-E1-A6
 <400> 2085

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 actggccggg gaggggtcag aaacctttca tccaatacat acatctatct gagccctttc 120
 ccgcggtgag gcccgaaccg agtccacaca cacacggtgt cgatggcggc cgtaataagg 180
 agccgccgcc gcgtgtccgt tttctttctac gtcgtcctcg ccgcagctgc agctgcagcc 240
 gcggcgcagg catccaataa cgtcacctcc gacgaggagt actgggcgga gcgcgccgag 300
 gtggctcggg cgcgcaacct cgccgectac gtcagcgacc ccgtggccgc cacgaaccg 359

<210> 2086
 <211> 447
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-045-Q1-E1-A7
 <400> 2086

ctcgggggcc gacccacgcg accacgctcc cgactagcat ccaccggtgg ccaagacctc 60
 tgccacgccc gaaccgtacg catctctgaa cgtcgccggc ggccgggcagc ccaacgagcc 120
 ggccggcggg aggccgccga agctgtcgat ggagacgttc tcgggggatga tcaagaggcc 180
 gttcgccaag ttcctgagcc cgggtgatcaa gggcgtgtgc gccaaagacgg agtaccgcga 240
 ggactgcgag tcgtcgatcg ggggcctccc gggggccgcg tcggcggcgg ccacggacag 300
 cgtgggcgtg ctgaagctgg ccatggaggc ggtgcggcag aaggccatcg aggcgatgaa 360
 cgccggccacg gacaggatga acgcgccggg cacggacctg acgaccaacg angcgctcga 420
 ctcgtgcacg tcgtcgtaca gcgacat 447

<210> 2087
 <211> 415
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-044-Q1-E1-G10
 <400> 2087

cacgagtcta aactggacgt cctggaacgt cgtacgagaa cctttctccc tcctccacct 60
 ttctcctttt cttgccacgg caaaacacct tcgccggcga gagcatggcg atggcgtagc 120

gtgtcctgga ggtcaccctg gtgtcggcaa atgacctcaa gaaagtgtcg ctcttctccc 180
 ggactcgcac ctacgccgtg gcttccatct ccggattcga cctccgcac ccttcccaca 240
 gcaccaagc agaccacagc aacgggtgca acccctgctg gaacgccgtg gtacacttcc 300
 ccatcccggc tgccgctgac acccgcgggc tcgcactcca cgtgaggctc cgcgcccagc 360
 gtctatacct gggcgatcgc gacatcggcg aggtgtttgt gcccatcgac gacct 415

<210> 2088
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-G12

<400> 2088

cccggtcga cacacgactc tacatcgact cctatcaata tacatatata gacctataa 60
 gaacaaagac gtacgataac ctgcttattt tgcgacccat cccgttccca cgcaaaggcg 120
 ccgagcgtga tctccgtccg tgccgccatg gcctcgacc gggcgctgct gctgctgctc 180
 ctgcccggc cgctcgctgc tgcgctggcc tctgtcgcat ccgccgacga cgccaacgcc 240
 atgcccacca tctgacccc cgtggcgcat acccgcgtgg ggtccttcga cggcgacaag 300
 ccggcctctg acgacgacgc cgctcgacgac gacgaggacg ccgcccctgt cggcgcgccc 360
 aacggggcca ccatgactga gcccaggac gacgtccccg ccccgcccgg cgccgaagca 420
 accgcgggcg gcgcccgc 437

<210> 2089
 <211> 406
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-044-Q1-E1-G2

<400> 2089

caaaacaaga acctccaatt agaagcaacc aaaggaactt attaaactcc taacggcggc 60
 aatccaaaaa acaaggcaaa ccgacccggt cccaaaggaa atccttcgcc gacgtacaac 120
 ggcaaccgaa ggacaaaaat ggagatgaaa aggatcctct tcgccgtcct cgctcgatc 180
 gccgcctcgg ccaccgcagt gctggcctcc accgaggccg ccgccgcggg cgccccaact 240

gcctccgagt cgctccgccga ggctcccgtt ggcgctggcg ctggcgctgc cgctggcgcc 300
gccgcccggg ggccctccgc cagcagcggc gcgcccggcc tcgcccggcg gcccgcccgg 360
ctcctcttct cncctctcgc ctactacctc cactaagcgt gtgcgt 406

<210> 2090
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-G3

<400> 2090
cccaatggcc gcaaggggtcc gttcgttccc ctctgtcttg gggccccttt tcctcgtcac 60
cctcttcgtc tcggccgagg caattgcccg gaccgtgggc gacaccgtgc aggacgcgtg 120
cagcaatacc aagtccccca agatctgcgt ggacagcctc gtcgccaatc cggagagcca 180
gaaggcgact ccgcgcaagc tggcagagct gttcgtgaac atcgcgggcg agaagggatc 240
ctggataggc agcttcgtgc accgcaagta cagcgacaag gatgacagcg acatattcaa 300
gtgctacgac agctgctccg acaacgtgga ggaggccgtc gccacacctca acggactcgt 360
ccgggagcca ccgacgcca gttcctcgag ctcaagtcgt agctctcct 409

<210> 2091
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-G9

<400> 2091
gtcgatacac gaatctaaat tgcctcgtat cacagggggg acaggaaatc agcggccatg 60
gcctcgattc cggcgacgac cttcgccgtc atcttatccg tcctcttctg tgccgaggct 120
ggcaccgccc tcgacaacga cctccccgac tacgtcatcc agggccgctg ctattgagac 180
acctgccgag ccgggttcgt gaccaatgtc accgagtaca tcgcgggcgc caaggtgagg 240
ctggagtgca agcacttcgg caccggcaag ctcgagcgtc ccatcgacgg ggtgaccgac 300
gggaacggca cgtacacgat cgagctcaag gacagccacg aggaggacat ctgcgagggtg 360
gtcctggtgg agagcccgcg caaagactgc gacca 395

<210> 2092
 <211> 449
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-F6

 <400> 2092

 tcataggacg atacacgcct ctacactcac gtcctaacag cccaacaag ttgtgtactg 60
 ccaacggcgc ctccaaggct accgtcaagg atgtcacctt caagaacatc accggcacct 120
 cctccacccc ggaggccgtt agcctgctct gcactgcaa ggtcccatgc accggcgctca 180
 ccatggatga cgtcaacgct gagtatagcg gcaccaaaa caagaccatg gctatatgca 240
 cgaacgcaa gggcagcacc aagggttgcc tcaaggagct tgcattgctt tagaccctcc 300
 gtcgactgac ccatctctct agttataatt tttctctcgt ccttgcatg cccattagat 360
 gctatccatt ggtaacgcac aacagtaaaa cgacagacat ccgacagcta tattatgttc 420
 gacggtgtaa caccctgaat ttgagggtta 449

<210> 2093
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-044-Q1-E1-E2

 <400> 2093

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 tggccccggc ataatcgggtg cttccccttg gaacggctgg ccttcgggaa ccgcaaacc 120
 cgctgcggcg gtggccttct ccttaccggg gtcgcttct cccttctccg ccttcccgcg 180
 tcctcccgcg gccccgccc cagcgggatc gggggccctc atgtcgaagg caaaggctca 240
 caccgacgtc aacgttctgc gtcncaagga gtactgggac tacgaggcgc tcaccgtcca 300
 atgggggtgag caggatgact atgaagttgt cagaaaagtt ggaagaggta aatatagtga 360
 ggtctttgaa ggcattcaatg ttaacaatta tgagaaatgc atcattaaga tccttaagcc 420
 tgtcaagaaa aagaa 435

<210> 2094
 <211> 364
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-E4

 <400> 2094

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 catacttcgg ttcaggaggc acgcaggcac gaaggcaggt tcgagggggg attggctccg 120
 ctctgtctcc attgcgcgcg atccggctcg ttcttgtgat ctgtctaccé gtttcttggg 180
 tcagtgtctg aaggtcaaac tgttggtgga aacctcaccg gggtgcttca acgaacgcga 240
 aagtgtcact gtcatttagc gcgtcttgat tggatttgac ctggtggcct ggtggcgtgt 300
 tgtccttgat tgagctcgag gatgactaaa tgggggctca gcagcggcac gcccgcgat 360
 tcct 364

<210> 2095
 <211> 264
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-E9

 <400> 2095

 actgcacct tgctaatact ggtacgcagg ccgctcttgt cctctacaca ggagttcgct 60
 gcagccgtca cacactcagt ggctctgttc atcggcggtg gctacctctg gtgactaatt 120
 ttctaaggaa cggctctcta ttcctatact ctgaattcta tgccgagact agtagctaatt 180
 tctgcacact tcggcgcgat gtggatatac agctgcgcgt cgcttgatag gagggctctct 240
 atgggtgcgc gatgaatgat actt 264

<210> 2096
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-F12

 <400> 2096

tacaacaccc tgaggtgagt cgtattaaat tccacgataa catcaaccac gtccagatct 60
gagtccagca catggtcctc ttccgcaagt gcatggagcc cgtggagaaa tgcctcggcg 120
atgccaagat ggtcaagagc accgtggagc acgtggtgct cgtgggcggc tccacgcgca 180
tccccaaagt gcagcagctg ctccaggagc tcttcaacgg caatgagctc tgcaagagca 240
tcaaccctga cgaggacgtg gactacggtg ctgctgtcca ggccgccatc ctgagcggcg 300
acggcaacga taaggtgcac gacctgctcc ttctggacgt caccggtgt ccctgggcct 360
ggagaacgcc ggcggggtga tgaacgtgct ga 392

<210> 2097
<211> 186
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F2

<400> 2097

cacgattccg gaaacggggtt accttttttt tcccacattt ataagcggca atacatgctt 60
gcacctgtag tattgtgacc atatgtactg tgctctcggt ttgtatatcg atagtagcat 120
ataaagctac tactcccgat ttgtaactat agatctcggt attaaagcca ttttattttt 180
attttt 186

<210> 2098
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F4

<400> 2098

gggcgaaccc ttgggcggac ccttggggca atggcggcca aggtgttcct cctcctccga 60
ctcaccatgg tcgccgtcgt cctggctgcc atcgccacat tattgctccc ggaggaagcc 120
gatccgcggg cactgccggc acagtggacc accgcgaaga agtacaaggc cacgatggac 180
gccaaagacgc ggcaggcttt cgacggcggtg gtggccgccg ctacggcaga gaagcggctc 240
caggcgggtg aggccgtgct gcagcagcag ctgaacatgg acgtgtccct gtccaaggcg 300
acgtcttccg gggacgagaa caactacgtg agcgtggccg ccgcctacga gaaggccgcg 360

ggcgccgtca tcgcggcgac gccggacaac aagctccgcg ctatggcggt cgcgttcgac 420

gg 422

<210> 2099

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D12

<400> 2099

ctcgcgggtc gatacaagac tctaaagtga cgtcatatga catcaatagt ccctaccatt 60

cggcgaacgt acaaatcaaa gtgcggcggtg cccgctcgca aactttgagt acgtactgct 120

actccggctc gtctctctct cttctccatc gccgttggtt ctctcacgcc acacgggtcat 180

ccgatccctg tccaccgctg tgggagcggc gcagcccatg gacgacaacg agagagagaa 240

agagaatgag aatgagaagg agaagcacta cgggactgac gtcgaggatg aagaagagga 300

cgaggaaggt aacaagcgag tcgtggtgct tggccccag gtccccctca aggagcagct 360

cgagctcgac aaggatgatg agagcctgag gaggtggaag gagcaactcc ttgggcaggt 420

cgacacagag cagctgggag aaactgcg 448

<210> 2100

<211> 407

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-044-Q1-E1-D2

<400> 2100

aggtgaaggc tgtggatgcc ttcggcaacc tcttggtact tgaaaacctg caacaaccgc 60

accatgatga caacaacatg atgctaaaat ttcccaaggc aagaaagttt gatatccaaa 120

aagcaaagca aatgtggtct gatatgctga agtggagaaa agagttcggt gcagatacca 180

ttctcgagga attcgaattc gaagaagctg ataagggtggc agaattgctac cctcaagggt 240

accatggggt tgataaggaa ggcaagcctg tctactttga acggcttga cagatcgatg 300

tgaataagct aatgcangtc actacaatgg atcgctttgt caagaaccat gtcaangagt 360

tcgagaagaa ctttgctggt aagttcccag cttgctcaat cgccgcg 407

<210> 2101
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-D7
 <400> 2101

gacacaagcg tccgatctcg agtctcctta caagggccac gatgagggcg cctctcctct 60
 cctcgctcct cgctcctcgcc gtcgctcgcca ccgtgcctct actagtcccg gcggtgtgca 120
 tctcgcgga cgacaagtcc gagagcaagg ctgacgaata agctgctgct actaccgttg 180
 ccgccgacga gcatggctct gtcaagacca tgtccctcga cgcatacggg ccaactggaga 240
 tggccgcaa gaagcccaag gagcaggtcc tgaacgcga agctacgctg gcgacgaccg 300
 ctggcgctga cacatatgac cagaaacccg ttggtgaaaa acaggctgaa acggccacgg 360
 tctccgctgc cgatgaacaa cccgacaaat acgtggaagc tctagttcct gacgag 416

<210> 2102
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-C5
 <400> 2102

tcacgggtcg acacaagcgt ccacacacgc ttctggaatt tgggtgctgct tggtaacaa 60
 cattaaagtt caaggtcaat gaatcgta gctgcagata tatgctaggt agtaacaagg 120
 ctgatattca ctgcaacaag ctattcaatt gtactgctga ggaaccttcg actggggagc 180
 ttttcaaaag gatacttata ctgttttcag agatgtatgt gtcagaagat ttcagttcag 240
 ggcgaatgct tgtatatgtg gcagcaggtg ttgtgctggg catgctgagt tcgatgttca 300
 ttacggcctt attcagaggt atgtatgggt tggtgctcgc tgccgccagg tgggctgtga 360
 ggaagcattg catcagagta tttgccagcc ggttgaagcg tgccgcctt cttgtcgcct 420
 atgtatccgc tggttgctgg a 441

<210> 2103
 <211> 434

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-B2

 <400> 2103

 ggtc gatgca cgcctctaaa ataaatcgcc taattctttc gatcgaatta ggcgccttct 60
 tcgtcccacg ctccgtcttt atttgtaatc tgaagcttac aggaacattt gagtggatca 120
 tggacggatt ggtaggcctc ttgaaagtcc ggggtggtgag gggcatcaac cttgcctacc 180
 gcgacgcaag atgcagcgat ccgtatgtcg tcctacgact tggcaagaag aaacttaaga 240
 cgagcgtgaa gaagagatct gtgaacccca tctggcacga ggagctaact ctgaccgtca 300
 cagatcccag cctagctctg aagctggagg tgttcgacaa ggacacgttc agcaaggacg 360
 acccgatggg ggacgcggag atcgacgtgg cgccgctggt ggaggcggcg aacgcgagcc 420
 cggaggcgag cctg 434

<210> 2104
 <211> 255
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-B4

 <400> 2104

 ttatgtggct cccgttaacg acagggccgc agggggccat caccatcgtc gggatggtgt 60
 catttgcgaa gatgatcaag ttcaaagtac aggagaactg cgagatgaat ctgggcccc 120
 aggcaacgag tctaaggaca cccgccaaag attagaccag ctgttgcaac ccgatcaccg 180
 gcgtctcgca gctgattata tctccctggc caaggtgcgc tcaaagtga ttcgcaaac 240
 tcgttcatgt gccag 255

<210> 2105
 <211> 330
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-B9

 <400> 2105

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ttctctgggc tcaatctttc atatgtatga cgaggtcgca tcttcgtcac cagcactcgg 120
ggcggatttg ggtgacatgg actctcatcg ggaagaatca ccacgtccat ttgacatagg 180
atttgctcc gacgttgatg ccaacgacac gttaatagtt ctgccatcac tgcaacatgc 240
ataactacat caacgcattc tcaaagttct actctgagac ctctaacaca ccaatcgatt 300
tctgtacatt ccacaatttc atatatacct 330

<210> 2106
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C2

<400> 2106

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tctcttcttc cctggcatgg aggaagtacc tgtttcgcct atgatcgttg ccgccgtagt 120
gctggacaac aatggcgccg acgcggtctc ctgcactgcc atccctagcg taacaataag 180
cctagaggag aaagaaaata tcaatgggga tgttcccacg atcacctcgg ccgcaagcaa 240
cgaggaggag gcgttgttca gtgtcggaga atccaccaag gacgatggcc atcgcttgac 300
gatggaatgc accactcccg tctctccag tagcccttcc actcgcaaga agcgcggggc 360
gttcagctc ttcagggcga tgttctgtc cttcgcccg agcgacgaca gcatgaagaa 420
gacagacgac gacaccacga gcc 443

<210> 2107
<211> 293
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C3

<400> 2107

ttcaaaaacg cttctctgc tggttactcc gcgcgccttc tctttctctc ccggacttca 60
atcgtgttct tcagcacggg ctagctagct cctccctcc cagccatggc gacgccggac 120
aacaaggggc acgggcatcc gctgccaag tttggggagt gggacgtgaa gaatccggcc 180
acgtccgagg gcttcaccgt catattccat aacgcccgcg acgacaagaa gaccaccacc 240

ggccctgggg ctggaacgc gcgcgatgc attccgccg ccttcaggaa cgg 293

<210> 2108

<211> 303

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-A1

<400> 2108

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gatcgacgat tctgatactg ctaggtccta ttcagttggt tccatctcgt cgtcagtcgt 120

ctgcccggtc acgtcgtgga tcggacggaa caagtcggtg tgcagttgca tcatgaccgt 180

ataccttaac actttgacgc tcggcacggt catctgcacc gtgtagaga tgcaggggat 240

acggagcatc tctgcaggat actagactag caacgtctac tcatgttaca tagccagttt 300

ccc 303

<210> 2109

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-A3

<400> 2109

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acagaagaag ccgagtggac cctcaccgac gctaatacag aagggcggag gtgaaggaag 120

gaagactcca aatggtaaaa caggaaccaa gaagtaagca atccagatga aacttggttt 180

tgctgtgacc aacttcacct tggttaggga cagataaaca tgttgatact atcgggtgat 240

acattgatat ttgccacacg aatacgtcag tcctcttaag ggaggagggtc gctagatcct 300

cgggcatctg ctgtaaataca ctcgttgatt tggtgtagta cgaacagaaa acggaccaca 360

aaaaactcga ggatgggagg aagatcatca tcacaaggac gtttttgta gatgtatatg 420

ttgctt 426

<210> 2110

<211> 425

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-B1

 <400> 2110

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 aggtacgaag aacgcgacga acatggcgag gctggccttg gtagcggcgg tggttctgtg 120
 cctcctgtta gcgacagggc cgcagggggc catcagcgcc gaggggatgg tgtcatttga 180
 caatttgatc agctgcaagg tactgggcaa ctgcgacaag aacctgggcc ccgaggcctc 240
 ccgcccaggg aaacccgcca acgactacac ccgcggctgc aacccgatca ccggctgtcg 300
 cggctgatca tatctctctg gtcgatgtgc gcgcaatgtc aatgtcgcac gcgcgtgcag 360
 gtaccaggcc tcagcgtgtg gtgccgcgtg tgtgtatata ttacacacat gcattataca 420
 ttggt 425

<210> 2111
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-G10

 <400> 2111

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 gcgcccgggt cgaggagctg aacatggacc tcttccgcaa gtgcatggag cccgtggaga 120
 aatgcctccg cgatgccaaag atggacaaga gcaccgtgca cgacgtgggtg ctctgtggcg 180
 gctccacgcy catccccaag gtgcagcagc tgctccagga cttcttcaac ggcaaggagc 240
 tctgcaagag catcaaccct gacgaggccg tggcgtacgg tgctgctgtc caggccgcca 300
 tcctgagcgg cgagggcaac gagaaggtgc aggacctgct ccttctggac gtcaccccg 360
 tgtccctggg cctggagact gccggcggcg tgatgaccgt gctgattcct cgcaacaaca 420
 acattacaac gaag 434

<210> 2112
 <211> 206
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-G11

<400> 2112

gggtccacgc acgcgtccga attcattttc accgggaaga ttgtgaactg tctctctccc 60
tccttgtaag ttgctcctgt aaactcttcc tgaattcatg gcgtgctggt gtagcaatca 120
ccacttcctc cctgtgaatg cccacagcgt gtcttggtaa aagcatgtat gtatgaatat 180
tggagtatat gttactactc agctcc 206

<210> 2113

<211> 203

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-G2

<400> 2113

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ctgccgtctc catctccttc ggccactagg ctacgaaccc cttcgggacc agggaccgta 120
tgccgtatct ctggcacgtc ttctcgccgc ctccgggacc tctcgtaata tcaatctccc 180
tgcacctgga acgccgctcc agc 203

<210> 2114

<211> 272

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-G4

<400> 2114

tgagacgtat tatctccagt ctcgatggaa ctcatgctcg ccgcgctccg gccatacgcg 60
ctgccgtcgg cgtcaccggt ggccgccagg gtcgcgagca ggagggggcc aggcactgtg 120
acctgcgtct cgagcggggg gttccccgaa gacgggcacc tcatgtacta cgaggcggcc 180
ccccggttga acgcagtggg ggccgttgct acggaccttg gaaagctcca ggccatgggg 240
ctcgtcccgc gggacctcagt caaggagaac gt 272

<210> 2115

<211> 416

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-043-Q1-E1-G9
 <400> 2115
 gtcgatacac gaatctaaat tgcctcgtat cacagggggg acaggaaatc agcggccatg 60
 gcctcgattc cggcgacgac cttcgccgtc atcttatccg tcctcttctg tgccgcgggt 120
 ggcaccgccg tcgacaacga cctccccgac tacgtcatcc agggccgcgt ctattgcgac 180
 acctgccgcg ccgggttcgt gaccaatgtc accgagtaca tcgcggggcg caaggtgagg 240
 ctggagtgca agcacttcgg caccggcaag ctcgagcgct ccatcgacgg ggtgaccgac 300
 gggaacggca cgtacacgat cgagctcaag gacagccacg aggaggacat ctgcgaggtg 360
 gtcttggtgg agagcccgcg caaggactgc gaccaggtgc atgcggacag ggaccg 416

<210> 2116
 <211> 376
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-043-Q1-E1-H11
 <400> 2116
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 cctggctctc ttctgcatcg tgcattgtga gaaggaagag tcaaagggca tcgatgcgaa 120
 agcgtccggg cctggtgggt ccttcgacat caccaagttg ggcgctccg gcaatggcaa 180
 gacagacagc acgaaggctg tgcaggaggc atgggcatcg gcgtgcggcg gcaactgggaa 240
 gcagacaatc ctcatacca agggcgactt ccttgtcgga caactcaact tcacaggccc 300
 ttgcaagggc gacgtgacca tccaggtgga tggcaatctg ctggcgacca cggacctaa 360
 ccagtacaag gaccat 376

<210> 2117
 <211> 404
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-043-Q1-E1-H12
 <400> 2117

cgctcgctg ggccttcatt tctcctagaa ggtacaaggt cgagaggaga agaaggcgag 60
 acgtgcagtc cgtcggggcac cgatcgagaa cagggaagca agaggctgct agagatcgag 120
 ctcatcaacc aaccaagtcg tacgtcgtca gcatcacgac cggatggcgc gtgccgcgctc 180
 cagctatgta tccaggaggg ggctctccgc agcgatgacg gtggcggagg agtccgtgaa 240
 gaaagtggac gacaaggcgg tgaagctggg aactgtggcc atggacatcg ccagcgcgat 300
 ggccaccacg actgatgaga agacggcggt cagggaacct gaacccgaga ccggatacta 360
 cggtccggtc accggcacga atgaggtgga cgccgccgac ctgc 404

<210> 2118
 <211> 225
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-043-Q1-E1-H2

<400> 2118
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 tttccgacat tcacaggggg gacaggaaat cagcggccat ggctcgcatt ccggcgacga 120
 ccttcgccgt catcttatcc gtcctcttct gtgccgcggc tgggaccgcc gtcgancaac 180
 gactccccga ctacgtcatc caaggccgcg tctattgcga cacct 225

<210> 2119
 <211> 180
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-043-Q1-E1-H4

<400> 2119
 tccacgcgctc agaaacgcgc ggtccggtga tcggtgtggc cgggtggcccg gatgagtcag 60
 ttagagagcg agcttttttt ttgatacggg ggagttaaaa aatccaaaaa tcttggtgta 120
 tgtacagttc tgtctatgag aaatactaac gcgtcttgca gtgctgctgc ctgctgcctc 180

<210> 2120
 <211> 136
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-E4

<400> 2120

tattaacatt ttgccctcct ccaactttct cattttcttg caatagcatg tcaactgttcg 60

tcattgatagc acctcaagta tgcattctatg tcatatcagt gactcttggg gcctgtaata 120

tcagctgcac aatctt 136

<210> 2121

<211> 258

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-E9

<400> 2121

gggtcccagc acgcgtccga atgaagatga tgactccacc aactgaggcc acacatgtcg 60

gcccgggttaa atttgaaca agacatggaa gaaaaatgag agcaatgtct ttaaaacat 120

gaatccataa taatgtgtgg tcatccatgg atacatcctt gctctccctc tttttctttc 180

tgtttgattt tcaatgtgtt atcatgttgt tagttaactg tatcgactca tggatatcaag 240

gtctaaaaaa ttatcgtc 258

<210> 2122

<211> 336

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-F5

<400> 2122

acccacgcgc tccgaccatg acgtcgtact taacgcgtgg gcgagacgcg tggaggtcgg 60

aggaggcaag ctgtgtcagc gcacgcagca gataggtcga gctgacgac catcaggtga 120

ctcgtcgtag gaggggcttc gaggattgag gaggcagatc gccctcatgt acggatagtt 180

ttaatggact aaaactcagt tctcacaaca cagtgatcag ttgtaggtcg aggccatggc 240

atttaatgtt gttgcatagt agcttgcagc cacaggcaca gtggttggcg ttgtgcctgg 300

atcaatgact tccttggcgt aggaatgaat gcagt 336

[illegible]

<400> 2123

<210>	2124
<211>	431
<212>	DNA
<213>	Zea mays

<400> 2124

<210>	2125
<211>	351
<212>	DNA
<213>	Zea mays

<400> 2125

gggtcccagc acgcgtccga aaagtatcac atgatcatca tttcttcctc aaagaatgtc 60
 tgccttttct ggctctggca caatttcaca agcatcaata gtaatgcaaa tccataatac 120
 catgttgaca actcaagcag tcatgcttac aagacaaggg aacttgggaa gttcctggga 180
 attttaacct tatatacaaa gatgaagaca agaatgatgg gcaaatttcc aaagtttaat 240
 aatgatttaa ccttgaagga cattccttta caaggtccga gtttcacttg ggcaaactctg 300
 caagctgatt cggtggtggg aaagcttgac agtttagtgg gaacaactgt t 351

<210> 2126
 <211> 370
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B9

<400> 2126
 gtccaagcaa gggaggaagg ggcagctcgc gatcgacgcc gagatcttcg aggtgacacc 60
 ggcttttcac gtcgtcgagg tgaagaagtc ggcaggcgac acgctggagt atgagatgtt 120
 ctgcagcaag ggcttaagac cttcactcag cgacatctgc tggagcagcc gatctgagga 180
 gaacatggct ccttcagtgg ttcagccatc ataattgaag ccatcctctt agaccgtctc 240
 cagcacttta tccatatggg tccccctct tagtcgattg ttatttaagt gcagcctctt 300
 cggagatgca attacaatcc atcctctctt tctttttccc tttctcaaag agctaagacc 360
 ttgctcgact 370

<210> 2127
 <211> 381
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-C4

<400> 2127
 gtccaccgac ccgtccgaga caagatggca tgcacaaaca atgcgatgag agccttggtc 60
 ctcttggtcc tcttctgcat cgtgcatggg gagaaggaag agtcaaaggg catcgatgcg 120
 aaagcgtccg ggcttggtgg gtccttcgac atcaccaagt tgggcgcctc cggcaatggc 180
 aagacagaca gcacgaaagc tgtgcaggat gcatgggcat cggcgtgccg gaggactgtg 240

aagcagacaa tcctcaatac caagggcgaa ttccttttcc gacaactcaa cttcacacgg 300
ccttgcaaag gcgacgtgaa catccaagtt gattgcaatc tgctggcgac cacggaccta 360
agccagtaca acgaccatgg t 381

<210> 2128
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-H8

<400> 2128

gatccacgcy tccaccagcc tgctggcgct ggcgctggca gcgctggctt tcgtctccag 60
ggccgcggcg cagggcaacg gctgttccag cgtgatgatg accctggccc cgtgcatgga 120
cttcatctcc agcaaggcgt cggagccggg gatctctctgc tgctcgggtgc tggccggagt 180
cgtgcagacc gacccccgct gcctctgcat ggtactggac ggcaactgcca cgtccttcgg 240
catcgccatc aaccagacca gggcgctgga gctccccggc gtctgcaagg tcaaggcgcc 300
gccgctcagc cagtgcacag gcgtccctgc ggcacctgca ccgacgcctc ccgacgagcc 360
agcagcggca gctgaggaag aagccgacgc agctgcagat gccccttcag cagatggagc 420
ctcaagctcc ac 432

<210> 2129
<211> 158
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-A2

<400> 2129

attctaggtc gaccgacccg tccgcaacag gatggcatgc acaaacaatg cgatgagagc 60
cttgttcttc ctggtcctct tctgcatcgt gcatggtgag aaggaagagt caaagggcat 120
cgatgcgaaa gcgtccgggc ctggtgggtc cttccaca 158

<210> 2130
<211> 442
<212> DNA
<213> Zea mays

gccatggcgt tcctgtggct cgagttctcg cagtcgttcc aggtgctggc aatcctcgcg 120
 tccacgcgca cgcgcgccgt cgcgctcggc tacaggttct gggtcggcgc ggggctcccc 180
 gccaggggag ccgcccacgt cgcgcgcggc tgccagctgg gcctcctcgg gtgcaagctc 240
 gcgtgccatg tcggcgctct gtggatgcat cttgggtccc tcggcggggg ttgcagcggc 300
 atgcgg 306

<210> 2133
 <211> 324
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B1

<400> 2133

cacgcatccg gtcgtacgag aacctttctc cctcctccac ctttctcctt ttcttgccac 60
 ggcaaaacac cttcgccggc gagagcatgg cgatggcgta ccgtgtcctg gaggtcaccc 120
 tgggtgtcggc aaatgacctc aagaaagtgt cgctcttctc ccggactcgc atctacgccg 180
 tggcttccat ctccggattc gacctccgca tcccttccca cagcacccaa gcagaccaca 240
 gcaacggctg caacccctgc tggaacgccg tggtagactt ccccatcccc gctgccgctg 300
 acaccgcggg cctcgcactc cacg 324

<210> 2134
 <211> 205
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-G10

<400> 2134

cacgcaaccg gctctgtctt atggtgacct tgtcaagagg gtcctccggt gctttgcccc 60
 ctgagagttt tccgttgccg tgaccatctt cggcggggcgt ggccatgccg ggacatgggg 120
 aaaggcactt ggtgcagagg tctatgactg caacaacatg gtggagcagg agctgcctgg 180
 aggcgggctc ctggtgtacc agagc 205

<210> 2135
 <211> 182

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-G12

<400> 2135

caggtccttc cgctggaacc tgacggcgag cgcggcgcg cccaacccgc aggggtcgta 60
 ccactacggc cagatcaaca tcacccgcac catcaagctc gccatggggc gcggcaaggt 120
 ggacggcaag gagcgggttcg gcttcaacgg cgtgtcgcac gtcgaccccg agacccccgt 180
 ca 182

<210> 2136
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-G4

<400> 2136

aacactctag actgagtcgt gatatgaatg tgagaaccat gtggtcgtcg atgcggggcac 60
 aggttgcat ggctgtggtg ttggtgttct tggtagcgg cgcattggtc ggtcctccca 120
 aagtcccccc aggcaagaac atcacggcca cctatggcaa ggactggctg gacgctaaag 180
 cgacatggta tggcaagccg acgggtgccg gtcccgcga caacggtggt ggctgcgggt 240
 acaaggacgt gaacaagccc cccttcaata gcatgggcgc atgcggcaac atccccatct 300
 tcaaggatgg tctgggttgt gggctctgct tcgagatcaa gtgcgataag cctgtggagt 360
 gctccggcaa gcccggtgtg gtgcacatca cggacatgaa ctatgagcct atcgcggc 418

<210> 2137
 <211> 432
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-G6

<400> 2137

ctcgcgggtc gacacacgcc tctacaaaga ttctacatca tacacaatac tgtgtcaatt 60
 tatcagtatc aacagtgcag aatttcctta gagttgcaat aattatatcc ccaatagctc 120
 aattgaagca atttaagcaa caaggacaat ggggagccgg acgtttccat aaccataata 180

acaagggttaa ccttgtatag taagaattga acctttggat ctaacaacaa acaacacatc 240
caccggatga ggaaggattt cacctttgag gccaatcctc acaccgcgga aggttcctcg 300
acgtccctcc cccgtccgcc gccaacgcca ccgagcctgg gcacatcgag gcctccaccg 360
attccgtcgg gcatgaacga ggcaggtcga ttctcgatga cctcgtcgat gaggccccag 420
tcgcgcgcct ct 432

<210> 2138
<211> 210
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-042-Q1-E1-H10

<400> 2138
cacgcatccg agacaagatg gcatgcacaa acaatgcat gagagccttg ttctctctgg 60
tcctcttctg catcgatcat ggtgagaagg aagagtcaaa gggcatcgat gcgaaagcgt 120
ccgggcctgg tgggtccttc gacatcacca agttgggcgc ctccggcaat ggcaagacag 180
acagcacgaa ggctgtgcan gaggcattgt 210

<210> 2139
<211> 194
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-H12

<400> 2139
cacgcgtccg cccacgcgtc cggacacggg cttcttccgg cgcgagggcg gctggagcac 60
ggagtacggg gagttcttca tgagctggtg ctgcagatg ctctgggagc acggcgagcg 120
catcctgtcg gcggcgacgg gcgtgttcac ggggtcccc ggctgaaga tctcggtgaa 180
ggtggccggg atcc 194

<210> 2140
<211> 307
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-H4

<400> 2140

ccttaacatc aaaaggccaa cctacaccaa cttgaacaag ctgatctcac agatcatatc 60
atctctaacc acctccctga agtttgatgg tgctatcaat gtggatgtca ccgagttcca 120
gaccaacctt gttccatacc cacgtatata ttcatgctt tcctcatatg cccctgtaat 180
ctctgctgag aaggcttacc atgagcagct ctctgttcct gaaatcacca atgccgtctt 240
tgagccctca agcatgatgg ccaagtgtga cccaaggcat gggaagtaca tggcttgctg 300
cttgatg 307

<210> 2141

<211> 202

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D9

<400> 2141

ctcgcgggct gatagtttgc tgcaaacatc atcttaatag atctggcttc cttttgggtg 60
cagtcagttt ggtgtaggca ccatcagagc cctgtgaaaa atagaagcac tcacgcatgg 120
tagcagcttg ttattgttgt tagctgctga cgctttgagg catgtcaaca agtagagatg 180
gattgcaa at cctaataaat gt 202

<210> 2142

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-E3

<400> 2142

gtgggtcgat acaagactct acagtgagtc atacataaag cgttgaactc gcctaagcag 60
ctaccaacca accctagaaa gctagacacc gtacccatgg ctgcgcttag cgtcgtcttt 120
gtcattgctg ctctcctctt cgtcgccatg gtcgtagcac cgatggccga ggcaaagtct 180
gccgatgccc ctgtggctga cgcgccggcc gatggaccta gcgggcgggc tgctgcacct 240
ggccccccagg gtgtcgaagg cctgtcaggc aatgaggatg acgatgatga ctccatgatt 300

tgaggccaca catgtctgca cggttaaatt tggaacaaga catggaagaa caatgatagc 360
aatgtc 366

<210> 2143
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-E6

<400> 2143

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aacagccagc tcgcgaaaat aatgaagagc cgcagcatgg catcatcggc cgcgctcttg 120
gtgctagccc tcgcgctagt ggcggccacc gcccacagg tagcggaggc aaagaagaag 180
agagcggcgg agagcggcga ggcggcggag gcgaagaaga tccaggacga cttctgctcg 240
acgctgtgcg agggcaagaa ggggacggac ctggctgtgt gcaaggagtc ctgcgcgctc 300
tcccagcagt ccaacctggt gctgtacggc aggatccagt gcaagggcaa gtgcaccgag 360
cagaagggca tcacggcgcc ggccatgaag gtctgccagg aggagtgcga caag 414

<210> 2144
<211> 211
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-E9

<400> 2144

gtccatacaa ctactagaa tgagtcgggc taacataccc tgcaggacgt gtacgactcg 60
ctggacgtgc acgtcggcca ctgcctctcc gtgctggtcg acgccgacca ggcgcccggc 120
gactactaca tgggtggcctc cacgcggttc atccacgacg ccaagtccgc ctccgccgtc 180
atccgctacg ccggctccag cggcgccccg c 211

<210> 2145
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-F2

<400> 2145

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atccatagcc tcgttgaggg aggcgccaac atccagggtc tcttcgacga cgccagcgtc 180

accctcggct ccggacccgg cctcggggct atcggcgggg caagctttgg ggattacttc 240

gtcggcccag gcctcgaaca actcatcgag cagctcgccg agaacgacct caaccgctat 300

ggcacgccgc cggtgcgaa atcgccctc tcttcgctcc ccgacgtcct cgtgactcat 360

gccatggtcg cagctgcgga gggcgctgag tgcgccgtct gcaaggaggg attctcgcct 420

ggaga 425

<210> 2146

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C1

<400> 2146

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gctcgttcg tctccctcgt cgtggcgccc cttctctctc tctccctcct cgtctccgcc 120

gcggccagtg cgcggaaccgt gggcgacacc gtgcaggacg cgtgcagcaa gaccagttc 180

cccaagatct gcgtggacag cctcgccgcc aagccggaga gccagaaggc gacgccgcgc 240

aagctggcgg agctgttcgt gaacatcgcg gccgagaaag gatgcgggat ggccaccttc 300

gtgcaccgca agtacagcga caatgaggac agcgacatat tcaagtgcta cgacagctgc 360

tccgacgacg tgg 373

<210> 2147

<211> 216

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C10

<400> 2147

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ggagcgggag gccgagggcg tcgcgcacgc caccagccc ctcgtgcacg aggccgccgt 120
 cgcgctcacc aactgaccgg accggccggc gttccccgtc gactgtgttc gatcgctaga 180
 cggggtggca cgctgcgatg actacctgta tggcga 216

<210> 2148
 <211> 223
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-C11

<400> 2148

ctcgcgggtc gatacaagcc tctaaaatga gtcatacatc cttctacaac gagctccgtg 60
 tggctcccga ggaacacccc gtctctctca ctgaggcgcc cctgaacca aaggctaacc 120
 gtgagaagat gaccagatc atgttcgaga ctttcaacac ccccgctatg tacgtcgcca 180
 tccaggccgt cctgtctctg tatgccagtg gtcgtaccac agg 223

<210> 2149
 <211> 148
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-D2

<400> 2149

gacaaggact acgttgtcaa ggccgctgag gtcaccaagg cctgcaacac cacctgcgcc 60
 aaggagaagc agcctctgct cagcgagaac tgcaggaggt cctggcaccc tcctccttcc 120
 tgaacgcaaa gcacgcccgc cggtcgtc 148

<210> 2150
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-A3

<400> 2150

ctcaagacta ggcggtcgg tccaagcctc cggttcaaga actgccacat cgtcacgcgg 60
 cggcccatgg acaaccagca gaactcgggt accgcgcacg gtcgcacgga cccaacatg 120

aagtcggggc tcgtcatcca gaactgccgc ctggtgccc accagaagct cgtccccgac 180
cgcttcaaga tcccccata cctggggcga ccctggaagg agttctcgcg cctcgtcatc 240
atggagagca ccatcgccga cttcatcaag cccgaaggct acatgccctg gaacggcgac 300
ttcgcatca atacgtctta ctacgccgag ttcaacaacc gcggccccgg cgccggcacc 360
agcaagaggg tcacctggcc tgggttccac gtcacg 397

<210> 2151
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-B4

<400> 2151

gggtcgaccc aagcctctac acagacgcct gccacgcgtc cggtcgatcat cacactcagc 60
ccgccttcac gcctccctca ccaaataatag tcgcgccctt taccgacatt cacagggggg 120
acaggaaatc aaccgtcatg tctctgattc cagcgacgac cttcaccgtc atcttatatc 180
tcacatcatc tgccacagcg ggcacagccg tcaacttgta cctcctcgac tacgtcatca 240
atagccccct cgactgcgac acctgccacg ccccgttctc gaccaatgtc atcgaatata 300
tcacggtctc caaagtctcg ctggacttca cacagttcgg taacgacaag ctcg 354

<210> 2152
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-B7

<400> 2152

actcgcggt cgatacaagc ctctacacag acgtcctgtt acgcgtccgc gttcgtcaag 60
cgcatgacgg agccggggcg gcggggaggcg tgccgggagc aggtggagcg ggaggccgag 120
ggcgtcgcg acgcgaccca gcccctcgtg cagcaggccg ccgtcgcgct caccaactga 180
ccggaccggc cggcgttccc cgtcgactgt gttcgatcgc tagacggggt ggcacgctgc 240
gatgactacc tgtatggcga gtcctatac ttactcatac atgagctgcg ccgccgtgtc 300
gtcgggtgct gcaccgcga gtagtgtcg tacagcggag agctgcgacg gctagcgagg 360

tacggtggtg ggt

373

<210> 2153
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-G6

<400> 2153

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gccaaagctt gccatggcag ccgtccggtc cgacagggtc caccaccacc accgccgctc 120
cgaggcgctg tgcccggcaa cctccgcggc cgtggcggcg gcgagggccg atgacgccct 180
gcgccagcgc ccgcgggggc tcgtgcaggt ccgggagcgg gatcagggcc cgctgtcgac 240
ggggcaccag cacctgcacc accatcacca ccagctgcgg cggtcggcgg cgttcccacc 300
ccgccgcccg gggccggggc gccgccctcc tcagcgctgc gaaagcgacc tcaacatcag 360
ggagcaccgc tcctgcagcg aggtggcccg cggcaccgcg gcgggctgcg ccgctgtgtg 420
ctgctg 426

<210> 2154
<211> 297
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-G7

<400> 2154

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gtgataggta gacatgatat gttacttcgc tggcgaaagt tttcatgagt cagcgctatt 120
tgagggggat tttaacattc attctttggt gtagagccat tcgtcttatt attacatcat 180
ttaattcatt cttggtaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaagaaaaa aaaaaaaaaa aaataaaaga aaaaaaaagg ggggcagccc aagaggt 297

<210> 2155
<211> 336
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-H10

<400> 2155

tcgcgggtcg atacacccga cttagtggcg cccagctccc gcctcttcgg gcgccgcgaa 60
ctggtgaagg aacccgacca gattgccatc cggtagctga agaacgactt catcaacgac 120
ctggcaacca tgctcccgat accgcaaattg atcaaccggg ttgttaaacc aactgtgaat 180
acatcctccg gcaatcacia caacaacaac aagctctcca agattgtgcc gattcaattc 240
ataccaagaa tccaacccaa aataaccctt aactccaaaa ttgttcaagg caattgaatt 300
ggtaacaaaa attgcctggg cgggggaggc ttaaaa 336

<210> 2156

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-H11

<400> 2156

aagactctga ggtgactcgt attaagctgc tcggtgagta cgggtgcaca gtcactccgt 60
gtaggcagtg ccatttcgaa gacaatattg caaaatttaa ctaacttggg ttacagtgc 120
gtttggttgg aagtaaaaat aataaactgg attgtaatac caactataaa taaaatcaca 180
gaaaaatcac aacaccaaca aaaaaactct caatgatcgt gctgatcaaa tacataccaa 240
gagtcaatct aataatatcc ttgaactcaa agatagtcgg ggcaacctcc agtgggtgacc 300
agataagcct gcgcgagggc ggagtacaac ctgcttctct acacgctggc aatccatgtc 360
ctcgggtgctc tctgaa 376

<210> 2157

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-H12

<400> 2157

accccgaggc ctccgaacca aacaacttcc cggttaacca agggtttcaa caaatggcct 60
tgtgattttt gcgggcaacc ctggtcaaaa gaaagctaag gtctcagaac taccaaaatt 120

tggaaaaccg gcaaaaactgc ggagttcctc gtggtggaca aaatactttg tccaaaactgg 180
 cttaacagag aacgaacggc cactgaagaa atttgaagag gctacatccc agaacatata 240
 ccaaccagat tgtcagatct tccacttaag ttcgccaagg tgatgcgcat ccagaacacc 300
 ttgggttggt gtcagttgtc acatcagttc tgtaagcagc acctttgctt acccctgttg 360

<210> 2158
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-H4

<400> 2158

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 agcaggcgga ggcgatcacc tccgccatca cggaggtcct caacgacagc ctcgagagca 120
 tctccgagtc cttcgtctcc aaggccgaga tgcagaagag tgagatgctg caggagtcca 180
 atatctccaa gttcaagtcc caagtgcaga gctcgcagga aaaccatttc tctttactac 240
 agcgggagac tgagaaactt cgcggagata ttgataagat gaggagtga ctgaagtatg 300
 agatcgacaa ggtcaccgca ggacagcgat tggatctgaa tcttgaaaga gggcgcatat 360
 gtgatgagct tgccaagcag aatgaggaaa cactgagct taccacaaag 410

<210> 2159
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-H7

<400> 2159

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 tcggcctttt gtcagggcat ccacaggggg gattgggaaa acacttgcat gcatccggcg 120
 gcaataatgg catcggttcc ggctccggcg acgacgactg ccgccctaata catatgacta 180
 tgcgtcctcc tctcctgtgc cgcagcctga gtacctaaag ctccccgact acgtcatcca 240
 gggcctcgtg tactgcgaca cctgccgcgc cgggttcgtg accaacgtca ccgactagat 300
 cgcgggcgcc agcgtgatgc tggagtgcac gcacttcggc accggcaagc tcgagcgagc 360

catcgacggc gtcaccgacg cgaccggcac ctacac

396

<210> 2160

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-H8

<400> 2160

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cgccgcatcc accgatggag atgaagaaga tcgctgcgc cgtcctcgtc gccgcctcgg 120

ccaccgtggc gctggacgag gagggccgg ctccgtctcc caccagcggc tcctccgagg 180

tcgcacccgc catcgtcagg gccgcgtgg cctccttctt cgcgtactac attcactgag 240

ccgccggacg atgagcctga tccggaggga agagaccaat gtgggggggag agacttggt 300

gcgctgcgt gctctgctgc tcacgcgcgc tcgcgatgag tgggcgtgct ctgattgggc 360

acagctgtgg cagtggcaca ccttcggcct 390

<210> 2161

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E5

<400> 2161

caggacctgg actcgcgga tcgacacacg cctccacaat gcgtcgaacg acgggggtgtt 60

ggacgccatg gcggtgttgc ggatgcaggt ggacgcgttc aacaagcgca ccgaggcggc 120

gagggcgcac gtcaaggagg ccgcccgtgac ggctcccc aaggcgcgga cgggtgctgga 180

cctgtgcaac aacctgtacc tggacgtgga ggacaacctg ggagcctgcc gccgcgccat 240

cggcttcaag gacgccgtca ccatccgcgc caecatgggc atggcggcgc aggacatgca 300

gaactgcgac gagcagttca ggcagatcgg cgagaagaac cccatggagc agttcgacgc 360

gtcgctcgtc gagatgtccg agaactgccg ctcgctctcc aacatgatct gatcg 415

<210> 2162

<211> 139

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E6

<400> 2162

tgagtcgtat taaggggtgt tggacgccat ggcggtgttg cggatgcagg tggacgcatt 60

caagaagcgc accgagggcg cgagggcgca cgtcaaggag gccgcggtga ccgcctcccc 120

gagggcgtga accgtgctg 139

<210> 2163

<211> 329

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F1

<400> 2163

agtcggacta ccggaggccg aggaagagac gaagcgggag agagagtgac atggctgcgc 60

gcattccgat gcgtgggcat gtttttgatt cgacacacct tttgtcctct ttttctttgt 120

tccctctttc tccttaattt aacgaattga tgcattgccg tgatgttctt ccccttgaga 180

gagggattaa cacttgatc atcgcttgcc atttgttga atccattcaa caattcgatt 240

tataaaaaaa gaaataaaaa aaaacaaagt aaagcaaaag tgaaaacact tcaacaagat 300

gaattctcga acggtccacc gaaggggtg 329

<210> 2164

<211> 306

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F12

<400> 2164

gtacaacgaa taggagccag ccagagaaac taataaaact ctcaccgccg ccatccgaga 60

gaacaagcca accgaccccg tcccaaggc aatccgtcgc cgacgtacca ccgccaccgc 120

aggagcgaga tggagatgaa gaggatcctc ttcgccgtcc tcgtcgtcat cgccgcctcg 180

gccaccgcag tgctggcctc caccgaggcc gccgccgcgg gcgccccaac tgctccgag 240

tcgtccgccg aggtcctcgc tggcgctggc gctggcgctg ccgccggcgc tgctcgtcgc 300

gggccc

306

<210> 2165
<211> 180
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-G11

<400> 2165

tgcgcgca gaacgtcaac ccgtacgcag acgcagacgc tgacaccgcc caccgcaacg 60
ctaacgcaa cgccaacgcc agcgccagcc ttccggagcc gccactcctc tacgacgtcg 120
gaaacccgtc cgcgttgcaac tccagcatat cgtcactgtc acaaacagcc tcgcactctc 180

<210> 2166
<211> 386
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-041-Q1-E1-G12

<400> 2166

gtgggtcgat acaagactct acactgacgt cctgattacg cgtccgcccc cgcgtccgct 60
cggcggcggt gttcaaaaac tgcctcatca tcaccggcg gcccatggac aaccaccaga 120
actcggtgac ggcgcacggg cgcaccgacc ccaacatgaa gtccggggctc gtcataaaga 180
actgccgcct ggtgcccgcac aagaagctgt tcccggaccg cttcaagatc ccctcggtacc 240
tgngccgccc ctggaaggag ttctcgcgcc tcgtcatcat ggagagcacc atcgccgact 300
tcgtcaagcc agaagggtag atgccctgga acggcgactt cgccctcaag acgtcttact 360
acgccgagta caacaaccgc gggccc 386

<210> 2167
<211> 281
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-041-Q1-E1-G2

<400> 2167

ggggggggng gggngggggg ggnngggggg gggggggggg ggnngggggg gggggggggg 60
 gggggggggg gggggggggg gggggggggg gggggggggg gggggggggg gggggggggg 120
 gggggggggg gggggggggg gggggggggg gggggggggg gggggggggg gggggggggg 180
 gggggggggg gggggggggg gggggggggg gggggggggg gggggggggg gggggggggg 240
 gggggggggg gggggggggg ggggggnggg gggggggggg g 281

<210> 2168
 <211> 267
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D1

<400> 2168

aggagacggc gcggcgctg ggcattggca gcaacatgta cccgtccacc accctgctgg 60
 gcgacaacaa gaccggcgag atgggaggcc tgaacatcga cgagctgatc gagaaggccg 120
 acgggttcgc ggggggtgttc ccggagcaca agtacgagat cgtgaagcgg ctgcaggacc 180
 ggaagcacat ctgcggcatg accggggacg gcgtgaacga cgcgccggcg ctgaagaagg 240
 cggacatcgg catcgcggtg gacgacg 267

<210> 2169
 <211> 333
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D10

<400> 2169

gtcgtattag ataccggcat ggagctctgg atgtggaaca ttagcgaatg gcagcgttcc 60
 tatcaatgga caatcttccc gaacacactg ttgctggact tcgtggcgaa tgcccaaadc 120
 cgcaggatct cactgcggag tagcaggttc ttcgacatga acatcttctc gagcaagaac 180
 gtggtgatgt acaatgtgac catcaaggcc cccggaaaaa gccccaacac ggccagcatc 240
 aacatcagcg actcgatcaa cgtgacgatc agtggcacca tcatcaccct cggccacgac 300
 tgcttctcca tcggccccgg gaacaagacc atc 333

<210> 2170

<211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-041-Q1-E1-B5

 <400> 2170

 tcgtttgatc aatacaactc tctaaagtga gtcattatcat catactatgt agttcctaata 60
 attacttgggt actcatcaca ggaagaaaaa catgaaattg ttgaacgtta caaggccaaa 120
 ctcagggtcta ttgattgtaa gcactttgac ttcgaaaagg gcacttgtcc atttggaagc 180
 agctgtttttt acaagcatgc ctactatgat ggccgttttg aagacgcttt attgaatcat 240
 catgatgccg acgatgcaag cgcagctatt gccaaactta tgaagttgtc gtacatactg 300
 actcggctac atgtgtaatg aaactcaaac gtatccttga tcaaactatgc tgacttcgat 360
 tgagattctt tgaccgagca tgcaaactta gatttcgcat tgtaatggat aatatt 416

<210> 2171
 <211> 401
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-041-Q1-E1-B9

 <400> 2171

 ggtcggccac gcgtccgcgc tcgttttctca ttcagcgccc gtacagccac cactcaaccg 60
 agccatatcg aaagtttctca acatcgcttc gtgcagcctg catcgatcga cgagggctgc 120
 acgaacgatg gggtcgcgct ccgcctcagt gatgacgacc agcctgctgg cgctggcgct 180
 ggcagcgctg gcttttcgtct ccagggccgc ggcgcagggc aacggctgtt ccagcgtgat 240
 gatgaccctg gccccgtgca tggacttcat ctccagcaag gcgtcggagc cggggatctc 300
 ctgctgctcg gtgctggctg gagtcgtgca gaccgacccc cgctgcctct gcatggctct 360
 ggacggcacc gccacgtcct tcggcatcgc catcaaccag a 401

<210> 2172
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-041-Q1-E1-C11

<400> 2172
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 tacattgaaa attggttttg gtcacatgc gtgtgatgac aaaaattgtg gcaatgcaga 120
 ttatgttgat gatcttgatg acatttccca agaagatacc tgtggtagtt ctgatcctgg 180
 caatggaatt gcggaagata aatttgaggt caatggatct gctcaaataa agcgtccaga 240
 atttcaaaag ggtgtcttac gtacaaactg tatacattgt ttggatcgca caaatgttgc 300
 tcaatatgcc tatggcctag ctgctttagg acaccagtta catgcacttg gttctgtaga 360
 atcgccagaa gttcatctag actctccttt gtctcgacat ttgatgcatt tt 412

<210> 2173
 <211> 365
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-041-Q1-E1-C3

<400> 2173
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 cagtacacag tgattgatgc aaactttatc tctaagatcc caatgttgtc tgagaacaaa 120
 caacactgag agaggggtgct ccaaacgtct aattcagcac attaccaata tataaaagta 180
 gttccgttgg ctttgcgata tcacatctta gcaaccttta agatgatacc atagatatta 240
 tatggattcc taaggttgga aatttgtgtc gtccgagtca cctagaatac ttgcttcttc 300
 ctgtctgaca atgaacttga ttttgtatcg atctgacata tatatgcctg accaaatgtc 360
 attaa 365

<210> 2174
 <211> 333
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-041-Q1-E1-B1

<400> 2174
 ggcccaggcg gcaccacccc aaccttcatg gacgtccggg gttttgggcc tggcttcaaa 60
 atcaagtgca atagcccggg gaattgctcg gggaagccct tgggtggtgca catcacggac 120

atgagctatg agccaaatcg cgggggtacca ctttcaattt accaggcacg gcgttcggcg 180
ccatggacaa gaagggcgat gacgagatgc tgcgcatagc gggcatcatc gacatgcagt 240
tccgaagggt taagtgaag tacgactcca aggtcacctt ccaccttgaa aaaggggtgcg 300
gccccagata cctggcactg ctgggtcaagt acg 333

<210> 2175
<211> 215
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H10

<400> 2175

ggtcgaccct ctaaattgag tcatattacg ccctcctccc cacgtgctc tccgtcaccg 60
acaaaaaact cggcttcttc aataacacaa gggccaacaa cgggcaaatg tacttcggcg 120
ctccgggagc cccctgcgtg gccaagctcg tcaaggctgt cgcagcgcg cgtactctg 180
tgtccatcat ggagatcagc gagcccattt tgccg 215

<210> 2176
<211> 180
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-040-Q1-E1-H11

<400> 2176

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cctcgtcgtg gcgccccctgc tctcctctc nctcctcgtc tccgcccggg ccagcgcgcg 120
gaccgtgggc gacaccgtgc aggacgcgtg cagcaagacc cagttcccca agatctgcgt 180

<210> 2177
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H2

<400> 2177

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tgatggcaaa tttgaacatg gctacataat aactgttatt atgggatcaa aatccactaa 120
 agcaatcctc tataactgca ctgaagaacc tgctctacca acttcggagc tagctgttgc 180
 aagtaacaac aatgatttga aggggtggacg tcgccgaaga cgacgtaaga agaagctaag 240
 tacaacagac cccaggcacc ccaaaccaaa caggagtggc tataatttct tcttccagga 300
 tcaacataga atgcttaagc cacaatgtcc tggacaagac agattgatca gtaaaatgat 360
 tggatgaacga tggacaacatc taagtctga agataaagct gtatatc 407

<210> 2178

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A11

<400> 2178

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 ttggtgcggc gccggccgcc gcgaacgcgc ccggcggggc gttcagcaac tgggtggcga 120
 tgaaccagca gagctacgcg ctgtacgcgc agaagtccgt cggggacggg ggcaaggagc 180
 ccctggacaa gaagctgtcg gaggcggaga agaagaatgt cacgtacgtg gtggacccca 240
 gcggcaaggg cgactacacc aacatcacgc cggcgctgga ggatatcccg gtgagcaaca 300
 ccaagcgcgt gatcctggat ctcaagcccc gcgctcagtt ccgcgagaag ctgttcctga 360
 acatc 365

<210> 2179

<211> 284

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A3

<400> 2179

ccggcgctaa taaccgcgcg cagcaaggga ttgggaccaa caacatcgcc tgcaccgttc 60
 tacgtacgcg gcctctagta aacgtggccc tggacgcaga agcgccggct ccgtatctat 120
 cagcggctcc ttggcggctg caccctacag cgtccgggac gccatggctc ccatcttctg 180
 gtactccatt cactgaaccc ccggacaatg atccgggtccg gtcggaatac acaccgcagg 240

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gggatatagc ttgcagcgct gcaactgcgct gctgctctcg cgca

284

<210> 2180

<211> 388

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-041-Q1-E1-A5

<400> 2180

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gaagagccgc agcatggcat catcgggccgc gctcttggtg ctagccctcg cgctagtggc 120

ggccaccgcc ccacaggtag cggaggcaaa gaagaagaga gcggcgagga gcggcgaggg 180

ggcggaggcg aagaagatcc aggacgactt ctgctcgacg ctgtgagagg gcaagaaggg 240

gacggacctg gtcgtgtgca aggagtcttg cgcgctctcc cagcagtcca acctgggtgct 300

gtacggcagg atccagtgca agggcaagtg caccgagcag aagggcatca cngcgccggc 360

catgaaggtc tgccangagg agtgcgac 388

<210> 2181

<211> 280

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A6

<400> 2181

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atcatcggcc gcgctcttgg tgctagccct cgcgctagtg gcaggcagcg cccacaggt 120

agcggcggca aagaagaaga gagcggcgga gagcggcgag gcggcgaggg cgaagaagat 180

ctaggacgac ttctgctcga cgctgtgcga gggcaataag gggacggacc tggctcgtgtg 240

caaggagtcc tgcacgctct ctcagcagtc gaagctggtg 280

<210> 2182

<211> 74

<212> DNA

<213> Zea mays

caagcctcta cacagacgtc gtattacgcg tccgccacg cgtccgcctc tcctctgtcc 60
ctctacggtg cttctgctcg cgggccaaa atcgctcat cgaccacgcc cccttccagg 120
ctcccgctc catgggtctc ctctcaaaca ggattgggag ggagagcctc aaggcggggg 180
atcatatcta ctctggagg gggcggtggg tctacgcga tcacggaata tatgtgggcg 240
atgataaggt gatccatttc acaagaggaa gaggacagga ggtcggaaca ggaactgtcg 300
tcgatattat tcttgtgagt tccaccccaa aacgaagcaa cacgccttgc ccggtgtgca 360
ccgacgaaac cagcgacagc agcacagaga 390

<210> 2188
<211> 350
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-F5

<400> 2188

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accgccgct ccgcgcggcg ctgttcttg ccatgggct gtcgggcgtc gtcccggcgc 120
tgcacgcgct gtgggtcaac tggggccacg ccgcctgcta cctggcgctc ggcctcgagg 180
tcgccatggg tctcgctac gccacggcg catggttcta cgtcagccgc gtgccggaga 240
agtggaggcc cggggtgttc gacgtcgtgg gccacagcca ccagatcttc cacgtgctcg 300
tgctcgtcgg cgccgtcacg cactacgtcg ccgtcgccgt gtcctccac 350

<210> 2189
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G1

<400> 2189

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aaaactctca ccgccgcat ccgagagaac aagccaaccg accccgtccc caaggcaatc 120
cgtcgccgac gtaccaccgc caccgcagga gcgagatgga gatgaagagg atcctcttcg 180
ccgtcctcgt cgtcatcgcc gctcggcca ccgcagtgtt ggcctccacc gaggccgccc 240

ccgcgggcgc cccaactgcc tccgagtcgt ccgccgaggg tcccgtggc gctggcgctg 300
 gcgctgccgc tggcgccgcc gccgcggggc cctccgccag cagcggcgcg cccgccctcg 360
 ccgccgcgcc cggcgcgctc ctcttctccc tctcgc 397

<210> 2190
 <211> 209
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G10

<400> 2190

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 gtcgacggag cgcgcgttcg aggcagaccc gatcccatcc ttgtcggaga cgatcacggc 120
 acgggcgata gcggccagct tcatactggg cgtcgccctc tgcgccgtcg ccatgaagat 180
 cagcctcaac tcgggcttcc tcccgtcgc 209

<210> 2191
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G2

<400> 2191

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 ccggatgcac gggccgtacc cgacggctgc tgctgctgct gcttcttctt cgggcgacat 120
 ggcggcgaac ggcataacg tggctctgca ccggcaggtc tcgggggggt cgatgaagca 180
 gaacgcggag ctccggcgcc aggcgtcgtc cgagtccccg cggacggggc gggccaccag 240
 ccggttcttg ttccggcggc agtcgtccat ggacccgaac cggacgcgcg gccggagcca 300
 gagccccgtg cgcgcgccgg acgacctggg cgtgccggac aacctggacg cgaccatgca 360
 gctgctcttc ttcgcg 376

<210> 2192
 <211> 411
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-040-Q1-E1-G4

<400> 2192

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 aaatgtcgcg cgtcacagct gcggtgctct tctacatcct cgccgttgct gccctcagcg 120
 cggccgaggg cccggcagag tcaccgaagg aaggcagtgc tgccaaggca cctgagtctg 180
 ccaagagaac tgctgcccc gctgaagcac ccgaagccgc atccaccccc gtcgccgccg 240
 ctgccccatc gccgtcgtct aggaagtctg gtccagctac cgcgccagcc accgcctcta 300
 ccccccttc ttccacggac gaagagttga gcccttcccc gccagcatcc accgccgcgg 360
 cgtcncctgc ggctgangga acggctgctg atgactccgc cgggtgctgct g 411

<210> 2193
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G5

<400> 2193

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 tggcgacagc agcgggtggc acgatgacga ctaataagcc cctcctcctc ctgcgcctgg 120
 cgtccgcgct ccttgggtgc ggcgccggcg ccgcgaacgc gcccgggcggg gcgttcagca 180
 actgggtggc gatgaaccag cagagctacg cgctgtacgc gcagaagtcc gtcggggacg 240
 ggggcaagga gcccctggac aagaagctgt cggaggcgga gaagaagaag gtcacgtacg 300
 tgggtggacc cagcggcaag ggcgactaca ccaacatcac cgcggcgctg gaggatatcc 360
 cgg 363

<210> 2194
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G6

<400> 2194

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gtttgtgcac caccctcgctc accttccagg ttggcaaggg atccaagcct ggccacctga	180
tcctcacccc caatgttgca accatatctg acgtggagat caaagagcac gggggcgatg	240
acttctcctt tacgctcaag gagggcccga ccggcacctg gacgctcgac accaaggccc	300
cgctcaagta ccccttttgc atccgctttg ctgtcaagtc cgggtggctac cgcacgccc	360
acgacgtcat ccccgccgat ttcaaggccg gcaccaccta caagaccaca ctcagcatct	420
aat	423

<210> 2195
 <211> 393
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G7

<400> 2195

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ttcatcagca atategcagt gaaggcggcg gccgtggccg cgctgctgct ggtcgcagcg	120
gtgtcgctg ccgcgcgcgc ggcggcggtg gcggtggcgg gaggggcgcc gtcggtgccg	180
gcgggtccgc tggacatcgc gcagctgggc gccaaaggcg acggcaagtc ggacagcacc	240
ccgatgatcc tcaaggcgtg gaagaacgcg tgcgaggcga cgggggtaca gaagatcgtc	300
atcccgccgg gcaactacct gacgggcggg ctggagctga agggcccctg caagtcctcc	360
atcatcatcc gtctcgacgg caacctgctc ggc	393

<210> 2196
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E8

<400> 2196

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ggaacgccag agaccggcg gcggcgacga tggctcccg cagctcatcg gcggcgacgt	120
gcctgtgcct cgctctcgcc gcggccacgc tggcgctggc ccacggggcg caaggaggag	180

<400> 2199

tctatattga ctctcatatc accccgcctt cagcctccc tcaccaaata aggtcccgcc 60
cttttccgac attcacaggg gggacaggaa atcagcggcc atggcctcga ttccggcgac 120
gaccttcgcc gttatcttat ccgtcctctt ctgtgccgcy gctggcaccg ccgtcgacaa 180
cgacctcccc gactacgtca 200

<210> 2200

<211> 216

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D12

<400> 2200

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cggtctcttc cccttccctt gggcgggcggc tttcgcccgg cgggcctcgg cgaagttctc 120
ggaaaatttc aacaaaactt cgtgccccaa cgccgaaaaa atcaccttgg gcgtcgtcaa 180
aaaccgggttc aaggcggacc ccggcaccgc cgccgg 216

<210> 2201

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D7

<400> 2201

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gctagctccc tccctcccag ccatggcgac gccggacaac aaggggcacg ggcacccgct 120
gccccagttt ggggagtggt acgtgaagaa tccggccacg tccgagggct tcaccgtcat 180
attccagaag gcccgcgacg acaagaagac caccaccggc cctggggctg ggaacgcgcg 240
cgcaggcatt ccgccggcct tcaggaacgg cggcggcgac ggccgggtaca ggccccgactt 300
cggcgacggc aaccagtaca cgccgccccaa acggaagaag tgggccttct gtggctgctg 360
aaaccaagct cgctgtgctg ctgtgct 387

<210> 2202

<211> 202
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-E10

 <400> 2202

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 gatgtcacca cctacaacac cctgctgaac gcttgggtgc ttgccggtga tctggaaagt 120
 gcccccaagg tgtttgatga aatggctggg gaggggaccg accggaactc ggtctcgtac 180
 aatgtcatga tcaaggggta cg 202

<210> 2203
 <211> 209
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-E11

 <400> 2203

 acaacactct aaagtgactc gtatgaccac acgcacacca ccgggttgtc gggcctgggc 60
 gtcaccgtgt tctccaccg gtacaagaac ccgcggcccg ccaccggcgg ctgctgcccc 120
 aggaacttga ggttgctctc gaacttggtc tccggcaggt ccgtgtcgat ccagttgtcc 180
 ctgaggtacc cggcgctcca cagcgggtc 209

<210> 2204
 <211> 212
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-E12

 <400> 2204

 tacaagcctc taaacagacg tcctataaaa tcaagatgcc atattagctg catgcctata 60
 tattgcttgt agacaagaag atcggcctag aactgtgaaa gaaatatgtt cagttgctaa 120
 tggggccaca aagaaagaaa ttggcagagc aaaagaattt atagtgaac aactggaagt 180
 tgagatgggg caatctatgg agatgggaac ca 212

<210> 2205

<211> 368
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-E2

 <400> 2205

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 gagaagactt tccgcggagg cggaggcgga ggctacggcg ggttggaggc cggaggcgga 120
 ggcggcgggc ggcggtactc cccccgagc gaggcagcgc catccacgcc tgccgctggg 180
 gagacgacga ccccttcgtc agggcgcggt tactccaccc ctagcgaggc agcgccatcc 240
 acgcctgccg ctgaggagac gacgacgact ccttcgtcag gcggcggggg ttacggcggt 300
 gcaaccggca aggccttcctc aagcgggcggc gggctggacc ccgacggcga cccagaggtt 360
 gggctgaa 368

<210> 2206
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-C8

 <400> 2206

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 agagaagtag ccacaagcat gtctggcatc atcgacaaga tccaggagac gtcacacatc 120
 gggggcgacc acaaggagga gcacgagcac aagaagggcg aggagcacca caagaagggc 180
 gaggagcacc acaagaagga cgacggggag cacaaggagg gcatcgtgga gaagatcaag 240
 gacaagatca ccggcgagca cggcgacaag tccggcgacc acaaggacaa agaccataag 300
 gagaagaaag ataagaagaa gaagaaagag aagaagcacg gcgagggcca tgaccatggt 360
 gatggtgacg gcggccacag cagcagcagc agcgacagcg actgatctcg cc 412

<210> 2207
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-E6

<400> 2207

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ggagggtgaag gaaggaagac tccaaatggt aaaacaggaa ccaagaagta agcaatccag 180

atgaaacttg gttttgctgt gaccaacttc accttggtta gggacagata aacatgttga 240

tactatcggg tgatacattg atatttgcca cacgaatacg tcagtcctct taaggaggga 300

ggtcgctaga tcttcgggca tctgctgtaa atcactcgtt gatttggtgt agtacgaaca 360

gaaaacggac cacaaaaaac tcgaggatgg gaggaagatc atcatcaca ggacgttttt 420

g 421

<210> 2208

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E7

<400> 2208

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atcacaggga gaacatcctt tgcttcccat ggccatgaag aagaaccaag actcccagtt 120

ggatcatgggc cggtagaggc tgggccaact cctcggcagc ggcaacttcg ctaagggtga 180

caaggcccat aagggtggcca cgggcgaggc tgtggccgtc aagggtgctgg acaaggatgc 240

tgtgcaccgc tccggcatgg cggagaaggc gaagaccgag gtcgacgtga tgcggcgcg 300

gcgccacccg aacgtcgtcc gcctccacga gatgatggcc acgcggtcca agatctactt 360

cgatcatggaa ta 372

<210> 2209

<211> 376

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-040-Q1-E1-A6

<400> 2209

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cagagcatca agaagctggt aatcaagaac tacaaaggcg taaagtttcc aaaatggata 120
aaaggtccca agctaggaga ctcttcccc agccttgtgt ttttggatct tgaaaactgc 180
atgtcatgta ctaaactgcc ttcaactggc ctctgagtc aactccagtc cctgcaaadc 240
tcaaatgcag actcagtcac caccatcggt tcagaattcc ttgggaccac tgtactttca 300
tcagccactc cattcnccaa gcttgaggtt ttaaagctca gaaacatgaa gaaacttgaa 360
gagtggctct taactg 376

<210> 2210
<211> 341
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-A8

<400> 2210

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ggaaaggcac ttggtgcaga ggtctatgac tgcaacaaca tgggtggagca agagctgcct 120
ggaggcgggc tcctcctgta ccaaagcttc tgtgctgctg aagacgctgt tgctaactcg 180
cccaaactcg ttttccactg ctttgacggg caaacgcttg agaatgctcc tcctcctatg 240
aagaaggact acaaactggc taatcttcta tgctgggagg aggaagcgga ttccatggag 300
gagaaagcgg gagtgcctga tgagtaagac agggttctgg g 341

<210> 2211
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B1

<400> 2211

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ccagcgacgc cgcgtccaag gacagggaga tgcaggtcac cgtcgccttc aaccacttcg 120
gcaaggggct ggtgcagcgg atgccgcgct gccgtcacgg cttcttccac gtggtgaaca 180
acgactacac gcactggctc atgtacgcca tcggcggcag ccggaacccc accatcatca 240
gccagggcaa ccgcttccgc gccgtcgacg acagcaggtt caaggaggtg accaagcggg 300

agtacacgca gtacagcgag tacaagaact ggggtgtggaa gtcgcaggac gacctgttcc 360
tcaacggcgc ctcc 374

<210> 2212
<211> 212
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B11

<400> 2212

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gtccgacagg gtccaccacc accaccgccg ctccgaggcg tcgtgcccgg caacctccgc 120
ggccgtggcg gcggcgaggg ccgatgacgc cctgcgccag cgcccgcggg ggctcgtgca 180
ggtccgggag cgggatcagg gcccgtgtc ga 212

<210> 2213
<211> 211
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-040-Q1-E1-B12

<400> 2213

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ggtgaaccga atgtcctcgg cggcaaaaag cttcaacaga gcctgcaaag caagggcggt 120
aaccgcgttt gcgaaaatta caatttgttt tcccctagga tgagtcggga ataacatcgt 180
gatctactct gaagcanagc agctagtgc t 211

<210> 2214
<211> 403
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B7

<400> 2214

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caccgcctcc gtgcgcgccg agaaccccaa cgagatgatc accatcaggt acggcgaggg 120
ctccacacc gtggtctcct accgcggcac gccgctgtgc tccgggaagc tcccggcctt 180
cttcaggggc tacaagaacg tcaccgtcat ggacatctcc atggagggcc gccacggctt 240
cgggtcgggg ctccagcagg cgctagagga gagcgagaag gccggggaca tcccgtcga 300
catcttcgtc agcgtccccg tggagctgca gtcgggtccc gtcgacctcc gccagattta 360
agtccacgtt cactgcgcgc gcgtcctcca tagcatcctc cgc 403

<210> 2215
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B8

<400> 2215
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cccagagcgc aaaggatctt gtcacgagga tgcttgaccc agatccttgt acacggttga 120
cggcaaagca agtccttggt tagtagcctt aagttcaatc ttataagttt actgaaaacc 180
aaatagaacg ggcaggctgc atccgttcct agaaaaaaaa acaagggtttt tcttgaagag 240
cctgttattg ccatcattga agaaaaaaaa ccgaaatggt ttaatcatgc tgcgtattta 300
accataagca ctttatcgtg gaaaaaaaaa gagcaccctt ggctcaagaa tgctgataag 360
gcttcaaagc tgctactcgg aaagggttgt cggtccaggc tgaaacaatt gtcctctaag 420
aacaagctta agaag 435

<210> 2216
<211> 200
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B9

<400> 2216
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cgtttcctcc gttaatccgg tagataatgg ccgatgccga ggatatccag cccctcgtcg 120
gcaacaacgg aactggcatg gtcaatgctg ggttcgctgg cgacgacgcc ccgagggccg 180

tcttccccag catcgtgggg

200

<210> 2217

<211> 185

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C12

<400> 2217

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cagcaatggg cgcttgccta aaaaacccca agacgcttaa ggggcaggcc ccacctgagg 120

ccgccgtctc cacaccaaag gttgcccccg aggccactcc aatctccgtt gaggttgccg 180

ctgat 185

<210> 2218

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C2

<400> 2218

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gccatgggag ccgtcacggt ccaagatggt ccatcatgac caccgcggca cgaatgcgtc 120

gtgtccagtg acctccgcag ccgttctctg cgccaaggcc gatgacgcc ggcgccagcg 180

cccgcggatg cacgtgcacg tccgcgagca tgacaagtgc ccgctctcca cggggcacca 240

gcacctgcac caccatcacc atcagctgcc gcggtcggca gcgttaccaa ccctgc 296

<210> 2219

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C3

<400> 2219

gacccacgcc tctagagaga ggcataggac gtaagaagtg gtctaattcc tggatccagt 60

taggcgactt catcgtcgt ctcttcatta ccagatttcc ttgtcatcgt caagatccaa 120

gcatagactt aatttagtta tagacggatt ggtaagcctc gtgaaaattc acgtggaccg 180
 gggatatcatc cttgccgata gcaacgcaag aggcatacat ccgtaagtca tcttacggca 240
 ttgcatgaag aagcgggaaga caagcgtgaa gaagagatca gtgaaacca tatggcaaca 300
 tgaacctaa gctgaccccg cagatgccac ccaaccacag aatcttgaag tggttcga 357

<210> 2220

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C5

<400> 2220

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 aaggtcccg ccttttcttc cgacatccac aaggggggag gggaaaacac gtacattcac 120
 ccggcgga taatggcctc ggttcgggct ccggcgacga cgaccgccc cgataccta 180
 tgcctatg gctgctcttc ctgtgccg gctgacgacc cgaacctccc cgactacgtc 240
 atccagggcc gcgtgtactg cgacacctgc cgcgccgggt tcgtgaccaa cgtcaccgag 300
 tacatcgagg gcgccaaggt gaggtctggag tgcaagcact tccgcacccg caagctcgag 360
 cgcgccatcc acgggggtcac cgacgcgacc ggcacta 397

<210> 2221

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C7

<400> 2221

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 ggaggggagg agggcgccag atggcgccgt gccggggctt cttcgagtgc ctgctcaggc 120
 tgctcaactt cactctcacc gtcgccggcc tcgccatggt cggctacggg atctacctgc 180
 tcgtcgagtg gatgaagata tctgaggacg gcagcagcgg ggggttgacg gcggagggtgc 240
 tggctctccg ccggccgttg ttgggggctg tcgctctcgg tgacagcttc ctcgacatgc 300
 taccctaaagc atgggtttatt tatttggtca ttggtgttgg tgctactgtc ttcctcgtgt 360

ctctgtttgg ctgcattgga acagggacaa gaaacacctg ccgtttgtgt ttccaagccc 420
tcct 424

<210> 2222
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-H1

<400> 2222

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atcttaattt atggccagca gaaactgaac acctcattgt caaagccccg gcatttcaca 120
ttgtgtagca tggaaaacag cttggatggc ccaatttcgc tgaagcagca gatgggttta 180
aggctcgtga tgctcttcaa aagcccaa at gtcagagcaa tagatcttct catggagtca 240
gcttcattgt tgctgttatt agatttgagc aagacagcag tggaggccat cccgaaatcc 300
attggtaact tggtagattt aaggtacctc aatcttgatg gggctcaagt cagagacata 360
ccttcttcca ttggatttct cataaacttg cagacctttg aaccttc 407

<210> 2223
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-H10

<400> 2223

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ggctactcaa atgagagcaa aggtagcgag ggcaagaatg atgttgctta tcaatcagca 120
acacccgtca tggattcgaa ctcatccaat cacaggaatg tgccaagatc tgatgtgaaa 180
aacagcggcg tagtttcaca ctctagagcc tggaagccga aaaccaattc ccattcctcag 240
gacagctcag acggcatgat tgctgttgac gggcaagtgg attcccatgg tggtaggctt 300
gagatgaata cgtccaaagg atctgataca attacccatc tagtgaccag tagtgaaccg 360
acgaaaagga atgattgcca ataagtttca cacaacaaa 399

<210> 2224

<211> 323
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-H12

 <400> 2224

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 ccccgccgag gatccggagc ctgggctacc tcctcccaag gctctctgcg agcagccgcg 120
 gcggcgggcg ccggtgcgtcc tccttagctt ctgggcagcg cgcgaccgct tcctccgggg 180
 ccggttcctc tcgggggggc tgcgcccctt ctccgtccgc ctccccctcg cgccgggcac 240
 cagcacgctc gtccacctct gggcgccgcc gcggtccgcg cgccggcccc tgctctctct 300
 ccacggcttc ggcgcgtcgg cga 323

<210> 2225
 <211> 389
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-H2

 <400> 2225

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 agcccatga gctgaagaac gtgccggcgg atttcatggt gaaattggc cctgagcatg 120
 cacggaagca atgtgccttc gtaggggtgt gatctctgga taagaggatg acgactcgat 180
 gattagctga ggaccaagtt aatgtctgtt agaaactgcc ggagatcgac attgccagat 240
 gtggtgtggt ataagatagg caatatgtgt gattattttt tgttcgaggt tatcaccccc 300
 cttgccccag aaaagatgag aagatgtcga tgtaacaagc cctctgcgct tctgtaagta 360
 gatgagtgtt gctgcatgcc ccctgggta 389

<210> 2226
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-H3

 <400> 2226

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cacaaggagg ctgggtgccca ggcccccgag ggacccatcc tctgcatcaa taactgtggc 180
ttcttcggca gcgcggcgac catgaacatg tgctccaagt gccacaagga gatgataacg 240
aagcaggatc aggccaagct ggctgcctcc tctatcgaca gcatcgtgaa cggcagcgac 300
gccgtcatgg agccggttgt tgctggcagc aacacggtag tagctgttgc ccaagttgag 360
ttgcaaacaa tgaacgtgca gcagcccgct gatgttgccg gaccagcga aggggtggcg 420
g 421

<210> 2227
<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-H5

<400> 2227
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cagccgccga cctccctctt ggcggcctcg gcctccccac tgacactggc ctctattaca 180
cggagatcaa gctcgggacg ccaccaagc actactacgt ccaggtcgac accggcagcg 240
acatcctctg ggtcaactgc atcacctgcg agcaatgccc ccacaagagc gggctcgggt 300
tagacttgac gctttacgac cccaaggcat cctcgaccgg gagcatggtg atgtgcgac 360
aggcattctg tgcagccacc tttggcggaa agctgccgaa gtgcggcgcc aatgtgccct 420
gcgaatatag tgtcaactac ggtg 444

<210> 2228
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-H7

<400> 2228
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cagccagctg ggcgccgca ccgacgggtt cagcgagcag aacctgctgg gagaaggcgg 120
 cttcggggcgg gtgtacaagg ggctcctcca ggacaccaga gaggtcatcg ccgtgaagca 180
 gctggacagg aacgggttcc agggcaaccg cgagttcctc gtggagggtgc tgatgctcag 240
 cctcctgcac caccgaacc tcgtcaagct gctgggctac agcaccgact ccaaccagcg 300
 gatcctgggtg tacgagtaca tgcccagggg ctcgctggat gaccacctcc tggacctgcc 360
 cccgagctgg aagcccctgc cgtggcacac gccgatgcg 399

<210> 2229
 <211> 387
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-039-Q1-E1-H8
 <400> 2229

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 cccaagggtg cgcccgaggc cactccaatc tccgttgagg ttgcggtga tgaacaggta 180
 gctgagaagg tgggtggtgga ggagccggct gcggcgggccg acgttgagca tcagaaggct 240
 aatgaggtgg tcgctccaga ggcgccgctc gccgagcccg atcacaagga ngangaagcc 300
 gtggagaaga ccgtcgctga ngangagaag cagcggcagc cgccaatgca gagganaagg 360
 tcgccaccgc cgccgagacc acgacga 387

<210> 2230
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-H9
 <400> 2230

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 ccgcgttgct cccgagctgt ttggcgagga ccaattccag cggacatgca accaggtgca 120
 cttcaggaag atgtgccaga gcttgacgag gctcccagag gtgaccacgc cgcgcgagct 180
 gctgctggcg tcgatgcgcg tcgcggcgga gaaggccagg gaggccaaga gccgggtgga 240

cgagttcgcg gcgaggaacc acgagggccg gccgatggag tccatcctcg gcgcctgcag 300
 caacgggtac ggcaacgttg tgcagacgct cgaggaggcg cggaagatcg tcgccacgcg 360
 ggcgggcgcg ggcacccagg cccaggccga cgacatgaac acg 403

<210> 2231
 <211> 395
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-040-Q1-E1-A1
 <400> 2231

acaagcctct atcgtgattc gatacatgga taacctggtc atcaccggca agggaaacct 60
 tgacgggcag gggccagctg tgtggagcaa gaactcctgc accaagaagt acgactgcaa 120
 gatccttccc aactcgctgg tgatggactt cgtgaacaac ggggaggtgt ccgggggtcac 180
 gctgctcaac tccaagttct tccacatgaa catgtaccgg tgcaaggaca tgctgatcaa 240
 ggacgtgacc gtgacggcgc ccggggacag cccaacacg gatggcatcc acatgggcga 300
 ctcatccggg atcaccatca ccaacaccgt cattggcgtc ggcgacgact gcattccat 360
 cgggcccggg acctccaaag tgaacatcac cgacc 395

<210> 2232
 <211> 336
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-040-Q1-E1-A2
 <400> 2232

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 ggtcccgccc ttttccgaca ttacacagggg ggacaggaaa tcagcggcca tggcctcgat 120
 tccggcgacg accttcgcgc tcatcttate cgtcctcttc tgtgccgcgg ctggcaccgc 180
 cgtcgacaac gacctccccg actacgtcat ccagggccgc gtctattgcg acacctgccg 240
 cgccgggttc gtgaccaatg tcaccgagta catcgcgggc gccaaagtga ggctggagtg 300
 caagcacttt gggaccggga aacttcaacg ctccat 336

<210> 2233
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-A4

<400> 2233

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gcacaggcga caaggcttgt gtcgggctcg ggagcagtga tataaacatc cccgatggaag 120
aagcgggttga tgaacctgtt aaaccggcgg aagctgtgga cgaagctggg ctgaagagag 180
atgtctgctg ttcaccagct gagccaaacg aagccgttgg tcagaacgag ctcaatgagg 240
ctgctgtcgt cggtgaaacg acgactgaac cgaaggaggc tgaggatgaa gccaagataa 300
taaagcaagt cgactgcgaa actgcatcaa aagaagttgc tagtactggg gccgagtcaa 360
gggacgatgc cgctactatg gaacgcgagc cgctggtagc agcagcaaca gcagcacaag 420
gaag 424

<210> 2234
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G8

<400> 2234

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gtgaccatcc aggtgaatgg caatctgctg gcgaccacgg acctaagcca gtacaaggat 120
catggtaatt ggatcgagat tctacgcgtg gacaaccttg tcatcaccgg caagggaaaag 180
ctcgacgggc aggggccagc cgtgtggagc aagaactcct gcgtaagaa gtacgactgc 240
aagatccttc ccaactcgct ggtgatggac ttcgtgaaca acggggaggt gtccgggatc 300
acgtgctca actccaagtt cttccacatg aacatgtaca agtgcaagga catgctgatc 360
aaggacgtca atgttacggc cccggggaca gcccaaacac ga 402

<210> 2235
<211> 358
<212> DNA
<213> Zea mays

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 ttttaaattt atcatcacca gaagtagaag acgcatcaaa gttttcagct cctgctgtgg 180
 tggaaaataa ttggttttaa cgatcactgc cttcaaaaac ttggaaatta agaactgttg 240
 attccaccct tagtcatgaa gagagggagc gtacgaggag gagagctgct gtgagatcag 300
 cttttgtcca gcatctcctt gtcaccacca tttttgaaga ctagcagatc aagcacagct 360
 catgcatagg aatcttgtgg gcgggccttt tgcncactca tttatctgga tggataatgc 420
 actaatta 428

<210> 2238
 <211> 297
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-F7
 <400> 2238

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 aatgcatcaa gtacagtcac cgattcactg ctacgctcac taggtgggaa tttagcatca 120
 ccagaagtac aagaggcagc aaagttttca gtcctgctg tgggtggaaac taattggttg 180
 agacgatcac tgccttgaga agcgtggaga ttaagaactg ctgagtcgag ccttagtcat 240
 gaggagaggg agcgtaggag gaggagagct gctgggagat cagcgtatgt cgagcat 297

<210> 2239
 <211> 417
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-F8
 <400> 2239

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 ctcaccaaatt aaggtcccg ccttttccga cattcacagg ggggacagga aatcagcggc 120
 catggcctcg attccggcga cgaccttcgc cgtcatctta tccgtcctct tctgtgccgc 180
 ggctggcacc gccgtcgaca acgacctccc cgactacgtc atccagggcc gcgtctattg 240

cgacacctgc cgcgccgggt tcgtgaccaa tgtcaccgag tacatcgcg ggcccaaggt 300
gaggctggag tgcaagcact tcggcaccgg caagctcgag cgctccatcg acgggggtgac 360
cgacgggaac ggcacgtaca cgatcgagct caaggacagc cagaggagg acatctg 417

<210> 2240
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F9

<400> 2240

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gacacggacg gggacggcgg catcgctccc acggagctgg gcgtcctcat gcgtccctc 180
ggcgggaacc caaccaggc gcagctccgg gacatcgccg cgcaggagaa gctcacggcg 240
cccttcgact tcccgcgctt cctcggcctc atgcgcgccc acctcaggcc cgagcccttc 300
gaccgcccgc tccgcgacgc cttccgcgtc ctcgacaagg acggctccgg caccgtcgcc 360
gtcgccgacc tccgccacgt cctcacctcc atcgagaga agct 404

<210> 2241
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G1

<400> 2241

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gcggcgctg cgcattgggca gcaacatgta cccgtccacc accctgctgg gcgacaacaa 180
gaccggcgag atgggcccgc tgaacatcga cgagctgatc gagaaggccg acgggttcgc 240
gggggtgttc ccggagcaca agtacgagat cgtgaagcgg ctgcaggacc ggaagcacat 300
ctgcggcatg accggggacg gcgtgaacga cgcgccggcg ctgaagaacg cggacatcgg 360
catcgcggtg gacgacgcga ctgacgcggc ccggagcgcg tcggacatcg tgctgaccga 420

gcccgggc

428

<210> 2242

<211> 290

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G10

<400> 2242

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gctacgcaaa tgatagcata ggtagcgagg gcaataatga tgttgatgat caatcatcaa 120

cagccgtcat ggattcgaac tcattcaatc acaggcatgt gctacgatct gatgtgaaaa 180

acagcggcgt attttcacac tctagagcct ggaagccgaa aaccaattcc catcctcagg 240

acatctcaga cggcaagatt gctgttgacg ggcattgtga ttcccatggt 290

<210> 2243

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G12

<400> 2243

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cgccggccaa caactcagcc gctgcaaccg ccacatcagc catgggagct tgcgcaacca 120

atcccaagac gcttgagggg caggccccag ctgaggccgc cgtctccaca cccaagggtg 180

cacccgaggc cactctaate tccgttgagg ttgcggctga agaataaggta tcttacaatg 240

tggtggtgga ggaaccggct gcggcgcccg acgttgagca atagtaggct aatgaggtgt 300

tctctccaga agcggccgct cccgagcccg atcacaacga cgacgaaacc gtcgagaaaa 360

ccatcttcta ggaggacaat ccaaccgga 389

<210> 2244

<211> 116

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G2

CCGCGGC

<400> 2244

tgttgatcgc gcatcactga aggggagcag tggaatacgc cggtttcaga tctgccgtcg 60
tcatccatgg catgggaacg ccgtggtctc attggggggc ataaccgtgt tggcgt 116

<210> 2245

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G3

<400> 2245

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ttctgtctct tgtctctgtc atcctcgctc ggcttccccg gttcttgaga ggggaaagag 120
gaggcgatg agatggatcg ggagggatga gaggttccca gtgtgggaag ccgcgctcgg 180
cgctggagtc tccgccgaca tcgccgctgg gctcatcgag gttaccgtt cgatgcctga 240
tcccgactac agcttcgtca agctgccacg taatctccag gaactccaaa tcctcattgg 300
ccatcttgag aactatacta gcgactacac cctagacgtg ttcgtcggct agtgaccgt 360
gtagatcttc atgcagagct tcatgatcac tagaacgata ttcatgtcaa 410

<210> 2246

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G4

<400> 2246

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cggctgcggc ggtccggtgg cctggcccc acgcctagca tggggcccgg cgcggcctta 180
gccagcgcg ggcgcggctg cccagccacg gcacggtggc acgggcgcgt aggcgacggc 240
cccgtccctg acgggcgcgc ggcgcagccc cgggtgtggc ggcacggcct ccagcgggcg 300
cggccttagc cgcgaggcg agcgcgcggc ctcggcccga tggcgggcgc gaccccgtag 360
gcgctaggcc ccatgcgcga cgggtgcggc g 391

<210> 2247
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G5

<400> 2247

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 cccatctagt gaccagtagt gaaccgacga aaaggagtga tggcaaagag gtctcacaca 120
 gcaaacatga gaacctggca cgggaagatg gtaaccagaa gggtgagact gaacaggagc 180
 aggctaatcc tacactacgt cgccaaggcc agcccaatgc aaggtaccac aggggaggtg 240
 gggtcacacag gggaaggggg gggtatgaca ctgggaggcc aaaccatgtc acaaagtgtg 300
 agaggcgga ggggtggcagc catcttgaat accagccagt cggaccccaa acaaagctg 360
 cagacttcca acagagcctg ggcattggaag aacgaaccga agggcctcct gcttctggac 420
 aagc 424

<210> 2248
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E12

<400> 2248

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 ggggcgcaag gaggaggacc atcggcatcg gcggcggacc tggacaaggt cacggccgag 180
 accttcttgg acatcgagat cgacggcaag cctgcaggcc ggatcgtgct gggactgttt 240
 ggggacaccg ttctaaaac agcagagaac ttccgagcac tttgcacagg ggagaaagga 300
 attgccaaagt ccggcaagcc tctgtggtac aaggggtcga cgttccacag gatcatcccg 360
 gggttcatga ttc 373

<210> 2249
 <211> 352
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-E5
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 tccaacgtcc aattctacta gactttgaat tcccttcgat tcatccggca cagcgggcta 120
 tggaccttca gcagcaagct aattaagttg gcagcatgca ccgctaacct tatatactac 180
 tgagacttcc aaattctagt atatgtaatc cttttgttcg ggttcatgat cgaattccaa 240
 agagtggaaa acaagcaaaa ggttaaatat acatgccatt tttggaggca tttttttcat 300
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<210> 2250
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-E6
 <400> 2250
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 gcgacgtgga tggcggcgcc gcccggccgt ggcccaaggc cgtgaccaac ggcggcgtcc 180
 acgagctgct ggagtgcccc gtgtgcacca actccatgtt cccgccgatc caccagtgcc 240
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 gcaggcaaga gctggggcga atcaggtgcc tggcgctgga gaaagtcgcc gagtcgctgg 360
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 ataa 424

<210> 2251
 <211> 422
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-E7
 <400> 2251

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gccaccgctt ctggtgtggc ttttcccaaa ggtccgatcg acgtggcgaa gcatgttgct 180
cgggacgccc gcgccaaggg tctcttcaag ggcctggtcc cgacgatggg acgcgaggtc 240
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ccggacacgt ccggcctcgg cacgggctcc caagtccctg cgggcggcct cgccggctcc 360
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ta 422

<210> 2252
<211> 443
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-039-Q1-E1-E8
<400> 2252

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tctcgtcggc tcgaccatag ccgacgggaa ttaactgggc cgacgagaat taccctatac 180
tgctacaaaa acagcactaa attaggtcac tatttctgca cacataacat atatcacaca 240
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acaaacacat gcatttagac ataaacacat gcatttataa ttaaaatatt caccaacgag 360
tacgacatag tattgaaaca taacatccac caacaagtac gacatattat tgaaacataa 420
catccaccaa cgagttcgac att 443

<210> 2253
<211> 397
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-039-Q1-E1-E9
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 ctgccggtct gtcggcagcc gctttctect attcatcaag actgtaatgt ctattgttgc 180
 tacctaattgc ttctcacttg tcattttgga cacatgttcg acctattcaa ttttaattgag 240
 atgcctgatg aggctacttg caaaaataca tgtggtgttc tcaatgaata atatcaaattg 300
 ttgagctctc aaaaaaaaaa aaaaatataa aaaaaaaaaa aaaaacaaag gggggaagca 360
 ctaaaagatc caaacttaac atattgctgc atgcgac 397

<210> 2254
 <211> 369
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F1

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 taggtgtccc gggcaacgcc acctcccaac tgcaagccgg tgtacctccg cagcgtgcaa 180
 ccattgctga cagcccgcag atgccgcggt tcgttacctt gcacgaccag gcctagccca 240
 tgctcgcggt ctgcctgcca gcgcagcggc acgaccagct aacagtatcg tcgtcatgct 300
 cgtgtcctag tcgtcgttc agtgcgtcgt gcacgcagca tgtcatcgta tctcgcctca 360
 tctcgcctg 369

<210> 2255
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F10

<400> 2255
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 cctggcactg gcgtcgtgc tgataatcgc gtgcgcaacc ggcaagcagg gcaaccgggg 120
 gaggaagcgg gagcggcacg cgtcgcgcag gcacagcatc gtggtgccgg aacgtcagtg 180
 tggcgcagcc gcgggcgtgg tgcggcgga cgtgtaccag ccgtcgaacg ggccggcgcc 240

gtcgccgctcg ccgagcgagg cgctcgagctc gtacgacctg tcggggggcca acaagtcgtg 300
gttcacgtac gacgagctgg cgggcatcac gggcggttc tcggcggcga acgtgatcgg 360
cgaaggcggg ttcgggaagg tgtacatggg cccct 396

<210> 2256
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-C11

<400> 2256

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cacgtacctc ccggaggcgg tgctcaacat cccgcccaac ccgtccatgg ccagcgcgcg 120
ggaggaggcc gagatggtca tgttcggcgc gctggacgag ctgttcgcca agaccggggt 180
gcggcccaag gagatcggcg tgctggtggt gaactgcagc ctcttcaacc cgacgccgtc 240
gctgtccgcc atggtcgtca accactacag gctccggggc aacgtcgcgga gctacaacct 300
cggcggcgatg ggctgcagcg cggggatcat cgccgtggac ctcgccaggg acctgcttca 360
gtgccaccgg ggcaacctac c 381

<210> 2257
<211> 350
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-C12

<400> 2257

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cctgcgtggc cgctgtgctt cctcgtctcg atcccacta cgctccgttc ggctccgagg 120
aagcacatca agtcgcgatg gagatgaaga aggtcgctg cgccgtcatc gccgccgcgg 180
cctccgcgat cgtggtcctc gccgtcgagg ccacggtgcc cgccccgacg agcgctcgt 240
cggccgcgtt cccggccgtc ggcgcggtgc tgggcgccgc cgtgagctcc ttcttcggct 300
acttgctgca ctacactgag atgaggatcg gagggagagg cagggggctg 350

<210> 2258

<211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-C2

 <400> 2258

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 tttctcgtca accggcaagc gcaattctgt gcctcgatcg atcggtcgta aggcaagtga 120
 gcaagctata tatatatata tatatatata tatataggag attcttcgag cgagctagta 180
 gcgagatggg ttccgcgcgc ctcttttact gcactctgcat cgccgccgctc gtcgcattgt 240
 cgtcgtccat ggtcgcgcgc aggtccgcgc cctcggggga aaccccccaag ttcactctcg 300
 cgagcgccct tgagtgtctc gctaacgtaa cggaatagc aaaggcgcgc aagctgatcg 360
 atgtccatgg ccacaggtg tgcccgggtgc ggttcgacca ca 402

<210> 2259
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-C4

 <400> 2259

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 caggatctca tgaacaccgt ctaagctctg ccttagatgg aactacgac gagaagagga 120
 aatccaatgt ggaatacaca gaggacgaga agaaagccgt gatcgcggtc ctgaaaaaga 180
 aggctttgag cgctcacag aagtttaggc attccatgaa gagggggagg aagagcagca 240
 tggatgatgt catctcgatt ctggatgagc gtgaacctga ggaggtgcat gctgtggatg 300
 ccttcgccca gcttcttgta cttgaagagc tgctaccatc gcagcatgat gactaccaca 360
 tgatgctaag atttctcaag gcaagaaagt ttgatat 397

<210> 2260
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-C6

<400> 2260

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cctccctggc atggatgaag tagctgtttc gcctatgatc gttggcgccg tactgctgga 120

caacaatggc gctgacgcgg tctcctgcac tgccatccac tagcgtaaca ataagcctac 180

aggagaaaaga acatatcaat ggggatgttc ccacgatcat ctcgcccgca agcaaagatg 240

aggaggcggt gttcagtgtc cgagaatcta ccaacgacca tggccatcgc ttgacgatgg 300

aatgctccac tcccgtttcc tcgagtagcc cttctactcg caacaaccgc ggggcgttca 360

gcctcttcag ggcgatgttc ctgtccttcg gtcggagcga cgacagcatg at 412

<210> 2261

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-C7

<400> 2261

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tctctgcata gaaagataaa aggtatgagg aggcgcagtg cgtgggtggga ttatttgtga 120

ggagatattg gagttattat atatatatat ataggtagac gatagataga cagctagatc 180

tatataacca tgggtggatgg gttccgatgg atcataccgg gctctttcgt cctgtacttg 240

gtcttcttct tctgtccgc agccctgtcg gaggccaata tcggcgactt cgatgaatac 300

tggcagcagc gcaagctcat ggtcgacgcc gcggctgagg ccacgtacaa gcatgacccg 360

gtcgagggtc ccaaccaact taaccgtgca gtccacagat ccgtcgagaa ggaggacatt 420

ggcac 425

<210> 2262

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-C9

<400> 2262

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cctgtgcggg caagcggcgg catccccggg gccctgaggc ggcgacactc ccaaggctag 120
cgagcaagcg gcgctctccg acatgcgagt agctacggca ccgcacaagg cacgaggttt 180
gagcagcgtc atggaaggcg cgagggtgtgt gcagcgatga tcgcgcgtga catcctccga 240
tccagcgcag ttccggcggc ctgagtgacg acctccatct gttcttgtgt catcaacgac 300
gtcctccgat gactacctcc tctaattcgt gttgtcttcc gattattatg ttttatgcct 360
accacatgca ctatttacgc taaaaactat aacgatttta tgcttg 406

<210> 2263
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D5

<400> 2263

ctcgtgggtc gatacaagcc tctaaactga gtcgtatcac ggcgcggccc aaccgcagg 60
ggtcgtacca ctacggccag atcaacatca cccgcacat caagctcgcc atgggccgcg 120
gcaaggtcga cggcaaggag aggttcggct tcaacggcgt gtcgcacgtg gacccggaaa 180
cccccgtaaa gctcgccgag tacttcaacg ccagcgacgg cgtgttcaag tacaacctca 240
tcggggacgt gccgccctcc aacacggccc ccaccaagat ggcacccaac gtcacacgcg 300
ccgagttccg cacgttcatt gaggtggtct tcgagaacct cgagaagagc atcgacacca 360
tccacatcga cggctacgcc ttcttcgccg tcggcatggg gcccgcaaaa tggacggcag 420
cgtcgcggag tacg 434

<210> 2264
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D6

<400> 2264

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gtgagagttg agctgggaag cacgtctccc gtgctgttat tggtgacctg tgatccctgt 120
gtcagcgatg acgtgaggac tggcacctag cgccagcgct tccatcctga acaactcatc 180

agtagcaagg ttgatgcagc ctacaacttc gctcgtggtc accacatgat tggcaaggag 240
 attgttgagc tgtgcattga ctgcatcagg acacttgcat ataactgcac tcgtctccaa 300
 ggcacctcgc tcatcatcgc tagttctgga agagttggct cttggcttgg atctctccac 360
 ctgtattgct tgtcagtgga ctatggca 388

<210> 2265

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A6

<400> 2265

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 gtccttgcta ccgcagctcc acttgttcga cttgtagaca ggcgtcgcta cgtgcgtggc 120
 tgccgcgacg cggttctagt cggcagtcac cagcacactc gaaaccttcg cctccgatgc 180
 gcgtctgcgg caaaggggat ggctgcggaa gcgacgcacg gcgggtgagg cgtcagcaat 240
 ctgaggcgaa gcccttcgtc gtcctcttcg tgtgcctcgg gaagatgtgc gcggatcctg 300
 cagctgaagc tgtggttcgg accctcgtac gtaaacaagg gcgtgactcc ggatttctca 360
 tagagtctgc tggtaaccatc gggt 384

<210> 2266

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A8

<400> 2266

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 taatggtgaa cggcaaggcg tacagcttcg agaagatgca ctggcactcg ccgtccgacc 120
 acaccatcaa cggccagagg ttcccgtcgg agctgcacct ggtccacagg agcggcgacg 180
 gcgcgctggc cgtcatcggg atcctctacc agctgggcgc cccggactcc ttctactacc 240
 agctgaagcg gcagctgggc gacatggcca aggaccggtg cagcttcggc gaggaggagt 300
 cgcacgaggg cgtcgccctc atccacctgc gctcgtgca gaagcgcacc ggcagctact 360

tccggtacac gggctccctc accgtgccgc cctgc

395

<210> 2267

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A9

<400> 2267

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ataaccctgc gtgcccttcg ttctcgtctc gatcccgacg acgctccctt cggctccggc 120

aaaccacatc aagtcgcgat ggagatgaag aaggtcgcct gcgccgtcct cgcgcgcgcc 180

gcctccgcca ccgtggctct cgccgccgag gccccggcgc ccgccccac cagcgctcc 240

tccggccggt tcccgccgt cgccgccgtg ctgggcgcct ccgtgctctc cttcttcgcc 300

tactacctgc agtaaaatta aaggagggtc ggaggagat gctgctggct gccattgcct 360

gtattcggtt ggattccgtt tatatat 387

<210> 2268

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B1

<400> 2268

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gccagagacc cggcggcggc gacgatggct ccgcgcagct catcggcggc gacgtgcctg 120

tgctcgtctc tcgcccgggc cacgctggcg ctggcccacg gggcgcaagg aggaggacca 180

tcggcatcgg cggcggacct ggacaaggtc acggccgaga ccttcctcga catcgagatc 240

gacggcaagc ctgcaggccg gatcgtgctg ggactgtttg gggacaccgt tcctaaaaca 300

gcagagaact tccgagcact ttgcacaggg gagaaaggaa tggccaagtc cggcaagcct 360

ctatggtaca aggggtcgac gttccacagg a 391

<210> 2269

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B10

<400> 2269

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cgagctactt catcattggg tctgccaagt cgttttacta agactgcgcc actgtttctg 120

taaagcaaat ggacgagatg atgaccttgc ctgtggcacc agctcacctt gacattcatg 180

acactccaat caaggttgcc ccaaggaaag gaggcttctc cttcagaaca tgtaccacca 240

ccggggaacg gcatcaaatc ttcctcggaa cgatgggcac gccttccacc tacgcctaca 300

cccaaactgc taacgagggt gtacccactg tctaccagag atggaacatc ttcatgcc 358

<210> 2270

<211> 231

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B3

<400> 2270

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ctcagtgtct catgtgaagt tactccagat ccagatgtat gcctaccctc gctgcaggct 120

gataccgagt ctgttatgcc acaggatttg tcggaggccg cactcctttc ggtgacgatt 180

gcaagcggag cagcgggtga ctacgttcgg cagcagactg atgtagtgag g 231

<210> 2271

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B5

<400> 2271

ctcgccggtc gatacaagcc tctacactga cgtcctggta aatgcagccc aaatcgggcg 60

gtaaaactccg tccaaggcta aatacaggcg agagaccgat agcgaacaag taccgcgagg 120

gagctcgggt tcttggtggg ttttcctttg ggtggagagc gagggagcgc agtcgagagc 180

cagcgagcag tctctcgtgc agtgcagtgc agtgcagtgc agctccggcg tagatgagat 240

tgtattgtga ccaagccggg agggaaagca gggaggggag gacaaagatg ttttgtcacg 300
 tttcatgctc cggccatcgc cggagtttgt ccggggaata tatcgatttc ctattag 357

<210> 2272
 <211> 386
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-039-Q1-E1-B8

<400> 2272

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 gatggctccg cgcagctcat cggcggcgac gtgcctgtgc ctcgctctcg ccgcgggccac 120
 gctggcgctg gcccacgggg cgcaaggagg aggaccatcg gcatcggcgg cggacctgga 180
 caaggtcacg gccgagacct tcttgacat cgagatcgac ggcaagcctg caggccggat 240
 cgtgctggga ctgtttgggg acaccgttcc taaaacagca gagaacttcc gagcactttg 300
 cacaggggag aaaggaattg ccaagtccgg caagcctctg tggtaacaagg ggtcgacgtt 360
 ccacaggatc atcncggggg tcatga 386

<210> 2273
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B9

<400> 2273

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 cagagagaga ctctctcgcc tccatcccat cccgccgccg ccgtctctac ggctcgtaat 120
 aagccgccgc atccagggat ggagatgaag aagatcgctt gcgccgtcct cgctcgccgcc 180
 tcggccaccg tggcgctggc cgcgaggcg ccggctccgt ctcccaccag cggctcctcc 240
 gcggtcgcac ccgccatcgt cggggccgcc gtggcctcct tcttcgcgta ctacattcac 300
 tgagccgccg gacgaggagc cggagccgga gggaagagac caagggtgggg ggagagactt 360
 ggctgcgctg cgctgctctg ctgctcccgc gcattcccga tg 402

<210> 2274
 <211> 273
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-C1

 <400> 2274

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 tccctcacca aataaagtcg cgcctttttc cgacattcac aggggggaca ggaaatcagc 120
 gggcatggcc tcgattccgg cgacgacctt cgccgtcatc ttatccgtcc tcttctgtgc 180
 cgcggtggc agcgccgttc acaatgagct ccccgactac gtcattcatg ggcacgtcta 240
 tttccaacac tggcgctccc gggtcgtgac caa 273

<210> 2275
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-H4

 <400> 2275

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 atgtcgcagt gaaggcggcg gccgtggcgg cgctgctgct ggtcgcagcg gtgtcgcctg 120
 ccgcgcgcgc ggcggcggtg ggcgtggcgg gaggggagcc gtcggtgccg gcgggtccgc 180
 tggacatcgc gcagctgggc gccaaaggcg acggcaagtc ggacagcacc ccgatgatcc 240
 tcaaggcgtg gaagaacgcg tgcgaggcga cgggggtaca gaagatcgtc atcccgccgg 300
 gcaactacct gacgggaggg ctggagctga agggcccctg caagtcctcc atcatcatcc 360
 gtctcgacgg caacctgctc ggcaccggcg acctcagcgc gtaccagagg aactggatcg 420
 agatcgagaa cgt 433

<210> 2276
 <211> 387
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-A10

 <400> 2276

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 tcgggaatgg ccgtttgtga cgaatgcaaa ctcaagttcc tggaactcaa ggcgaagagg 120
 agcttccggt tcatcgtgtt caagatcaac gagaacgtgc agcaggtggt ggtggacagg 180
 cttgggggac caggtgaaag ctacgatgcg ttcagggcct gctttcccg ccaacgagtgc 240
 cgctacgcgg tgtttgattt tgactttgtc actgatgaga actgccagaa gagcaagatc 300
 ttcttcatct cttgggcccc agatgcatcg agggtgagaa gcaagatgtt gtacgcaagc 360
 tccaaggacc ggttcacaga ggagctc 387

<210> 2277
 <211> 379
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-A12
 <400> 2277

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 cctcctgccc tcgcccgtgc tctcagatct cgcgcgcgcc ccgcaaaggg taactttgag 120
 ccatgggcac agttgtggat gctccagcag ttgtggctga agaggtcact gagaacatgt 180
 tgggtggtaa gaaagttaca gctgtatttg ttctaggtgg tcctggaagt ggaaaaggca 240
 cacagtgtgc caacattgtg gaacactttg gattcaccca tcttagtgct ggagatcttt 300
 tgcgtgcaga gattaaatct ggctctgaga atggaaccat gattgaaaac atgataaagg 360
 agggaaagat tgttccatc 379

<210> 2278
 <211> 426
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-A2
 <400> 2278

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 tccacggaca tctcactcgt gtccgtcggg aacgagatca tggacacggc cgacaaggcc 120
 ctcatctcca acctggtgcc cgccatgcgc gcgctcaagg cagcgtggt ggcggcgggg 180

tacccgaaga tccgcgtctc gacgccgcac tccctgggca tctgtccgt ctccgagccg 240
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 ttccaccggc agagcaggtc gccgttcatt gtgaaccctg acccgactt tgggtacaac 360
 ggcgtagacg tcccctacgc gctggcgccg cccaaccgg gcgtgccgga ccccggcacg 420
 ggcatc 426

<210> 2279
 <211> 353
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A3

<400> 2279

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 acgccgggaa tgggggtcttc cgcccgtagc ctcatcgcc tctgggtgc cgccgcctcg 120
 ctgccgtagc ggctctcgga tggcgccagg agtgggatgg cggcgccagt gtaccggtac 180
 gcggcgggga gcccacacg gccggagtag tgggggaagc tgagccccgc gtacaagctg 240
 tgccggggagg ggaagcagca gtcccgtagc gacatcgta ccaagcatgc cgtccccggc 300
 gccaacctcg acattctcaa ccgcacctac ggcgccatca atgccacgct cat 353

<210> 2280
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H11

<400> 2280

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 tatctcatca accttgtgag aaggcttctc ttttgaagaa taatgaacaa ccatgaggtag 180
 ggcaattgaa ctcttgtata gctggtagaa aagtcattgc acgtcggtag gctatagtag 240
 taggcatgag gacaaaaatg gtttctcatt taaggatcta gacaatggta ctttgtgctc 300
 aaaagatgaa atccaagacc atggtgacat ccattctaag gatgatgta agaagaatgt 360

gtgtggcaaa caagatttag atcaagattg ttcaatggat atatccagt acagaaagat 420
gaatatacaa tatg 434

<210> 2281
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F7

<400> 2281

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ggcggcaata atggcctcgg ttccgggtcc ggcgacgacg accgccgccg taatcctatg 180
cctatgcgtc gtccctctct gtgccgcggc tgacgacccc aacctccccg actacgtcat 240
ccagggccgc gtgtactgcg acacctgccg cgccgggttc gtgaccaacg tcaccgagta 300
catcgcgggc gccaaaggtga ggctggagtg cagcacttc ggcaccggca agctcgagcg 360
cgccatcgac ggggtcaccg acgcgaccgg cacctacacg atcgagctca aggacagcca 420
cgaggaggac atc 433

<210> 2282
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G8

<400> 2282

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cacccgcctc cgcgcgtcc cgctgccgca cgggaccaac ctgttcgcct gttcatccac 120
tcagcgacat tcacgcccgc atctcgccgt gggcagcacc gcactcacca ccgccgtcgc 180
agtgaggtca cgagtcagct gaagagcaag ttggtacctg gaatctcaag tcccaggtca 240
agaacaggta ccgcaggatg aggcgcatgg aggatgctgt ggcgagttcg tgagaggtct 300
aggccatcgt ctcccagtca actttgggtt gctggaccgt tgtctcctta taatgaaatt 360
atatttttat tttgtataga actcctgtta tatagtaaag atgtgacatt cgatccaaa 419

<210> 2283
 <211> 116
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-038-Q1-E1-E5

<400> 2283

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atacataggg ttgaagaaag tggcatcatc gtgagccggt tcgcttcgcg ctatcc 116

<210> 2284
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E9

<400> 2284

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cggaataatg gcccgatgc tgcgtgttct cgtcgtgctc ctctggccg ccatcgcggt 120

ggcaccgttc gggggcgccg caccggtgga cgttgtggag ggtaggtcca tggcatccgc 180

cgatgcaccg gagggggcgg ccgatgctcc cgctcctagc cccgactccg cctcatcccc 240

agactcgtca tcggaggcgc cctctagcag cagttcctcc gactagacgc aaaaacctct 300

tcattctctg gaataactaa cagtatatac gttgcaccct gatgatatag aaacatgtac 360

gtgcatcagt gtatggaatg cgagtggcaa acacatggaa tgtgcttgcc taattagtgt 420

tt 422

<210> 2285
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-D7

<400> 2285

ctcgcgggtc gatacaagcc tctacagtca ttctcagcat gaattcgatc aaggagaacg 60

acagggagct gatggcgggc ctgtacctcc aagtaagcat catcagccag gcgctcatct 120
tcgtgacgcg gtcccggagc tggtcgttcg tggagcggcc gggcttcctc ctgctcttcg 180
ccttcttcgc cgcccagctg gtggcgacgt gcacgcgggt gtacgccgac tgggacttct 240
gccgcatcca ggggatcggc tgggcgtggg gcggcgccat ctggatgttc agcatcgtca 300
cctacatccc gtcgacgtg ctcaagttca tgatccgcgc cgcgctcaga gacaaggcca 360
cgggcaacaa cgtccacaac aagtgatacg tttatctggg tgcttgtcgc ggacggcggt 420
taggaac 427

<210> 2286
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-D9

<400> 2286

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gtcccggagt cccgggggaa attttgcccc agaaacta gcgcgtcgga tcacaagcaa 120
gggcgaaaat tttctgtggc tccagcggct gaaggacgt gcggcaccca tgtcggacga 180
cactggtggc cgcgtcttac ccaagttcgg cgagtgggac gtgaacaacc cggcgtccgc 240
ggacgggttc acggtcatct tcagcaaggc caggacgag aagaaagctc ccccgaccca 300
aggccacatc aggaacaaca ggtcgggtgc ggctgacagc aaggactcca gggccgagaa 360
gatgacctcc tacaacgcca ggaccaacgc gtcgaagaaa tggttctgcc gtgtctcgcc 420
caacccc 427

<210> 2287
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B4

<400> 2287

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aagagctttc ttgacccaaa gaccactgca aagattcatg ttctgggtaa caagtatcag 120

agcaagcttc tcgaggtgat tgatgctagt gagttgccag aaatTTTTTgg tggAACctgc 180
 cgatgtgaag gtggttgcac gaaggctgac aaaggccctt ggaaggaccc cgaaatcatg 240
 aagatggttc aaagtgggtga tgggaggtgt ggatcactcg gtacggcctc tttcgaggct 300
 ccggagaaaa tgatttgtga agacgacacg tatcctaaga aacaagcttt gtttgatggg 360
 gaaacacaat tagctggaga cgagcattct cagtcacaga aaatttcccg tggccggatt 420
 gaacatcctc 430

<210> 2288
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A11

<400> 2288
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 aaaccgagag acctcagccc tcaggcaagc cgaccgccga cgtaccaccg cgccaacccg 120
 agagaaagat ggagatgac aagaggatcc tcacgcccgc gtcctcgtg gtcgccgtct 180
 cggccaccgc agtgetggcc tccaccgagg ccgccgccgc cggcgcccca gccgcctccg 240
 agtcgtcggc gtccgccgaa gccccgctg gcgccgccgc cgcggcgcc gccaccggca 300
 ccgccgcggg gccctccgcc agcggcgccg cgcgccctt cgcgccgcgc cccgccgcgc 360
 tcctcttctc cctcgtcgcc tactagctgc actaagcgg 399

<210> 2289
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A10

<400> 2289
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 ctccgacacg taaattgcac cgatcgagac acaggaaca tcggcaacag ccttggcggg 120
 aaccctgcc ctgtagctcc tcgatcgcg ctgtcacgga gctcttacc acgcctgcgg 180
 ccgtggacgc ggccaggctg gcggacatct gcatgggaac cgcgttcggc gatatctgca 240

ccaacacggt ggggagcgaa gtgcatagcg ccggtgtgtt agacgccatg gcggtgttgc 300
agattcacgt gggcgcgttc aacaagcaca gcgaggagga gagggcacac gtcaaggatg 360
ccgcaatgac agcgtcacac aaggcacgga cgggtgctgga cctgtacaac agcctgtacc 420
tgcacctaga tga 433

<210> 2290

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-H11

<400> 2290

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cagccggtgc agtcgcttgt gccccaccgt cgtgccgttg gccacgggcg cgccgtccac 120
gtacaccgcy tgccgctcca cgcgctgccc cagcgccacg tgctcctgga tccgcaccac 180
gttgaacgcc cgcgcccgcg cgcccggccg ccgcccgcagc tcgatccagt acccgttccg 240
gcgcccgtcc tcggccgtcg gcgcccagta cgtgtcgtcg cggccgtcca tcacgttgcy 300
cgccgcgaac cgggcgccgc gctcgtgtgt ggccctggcc tcgctgcccc cggcgaggtc 360
cgtgccgaag acggtggcca cggcgggccc gaactcgcgc agccgcgcga tgcgggcgtc 420
ctcga 425

<210> 2291

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-H12

<400> 2291

ccaagccttc ggttcatttc cccccaaccg gcaaggaaac ccggggggcaa aaggaaggaa 60
aatgggttcc gcaaaaaaag ctccccgggt ggttttcaac ccaaccgttg gaagttccgt 120
ttgcacaacc aaaaagacaa gagccaagaa agaagaatcc gccggaaccc ctggtgggtc 180
tgctggaggc agcggcgggga cgttcgacat ctccaagctc ggcgcgacca gcgacggcaa 240
gacggactgc acaaaggcag tccaagacgc gtggacgtca gcgtgcgaag cgaccggaag 300

CCGCGCGTTC AACAAGCACA GCGAGGAGGA GAGGGCACAC GTCAAGGATG

cgccacggtg gtgatcccca agggcgacta cctggtcggc cctctcaact tcaactgggcc 360
atgcaagggc agcagcatcg ccat 384

<210> 2292
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A1

<400> 2292

actcgcgggg cgacgcacgc ctctgcacag agtcatctat accagccagc cagcagccag 60
cttgctcgcc ggcgccgtcc ttcttctctg cctcggttcc attcgcgtcc gccctccacc 120
gccgcccgcg cattcagggg tggagatgaa gaagatcgcc tgcgcgggtc tcgtcgccgc 180
ctcggcggcc accgtggcgc tcgccgcgga ggctccggct ccggccccc cagcgggtc 240
ctccgcggtc ggcgccgcg tcggcgccgc cctcggggcc gccgtcgct ctttcttcgc 300
ctactacatt cagtgcgcg gccggggcgc ccggatgccg aggaagagac gaaggggaga 360
gagagtgcga tggctgcgcg cattccgatg cgtgggcatg ttttttgatt cgacacacct 420
ttt 423

<210> 2293
<211> 310
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-037-Q1-E1-E9

<400> 2293

gtgaacgtga agatgatcac cggcgacaag ctggccatcg gcaaggagac ggcgcggcgc 60
ctgngcatgg gcagcaacat gtaccggtcc accaccctgc tgggcgacaa caagaccggc 120
gagatgggag gctgaacat cgacgagctg atcgagaagg ccgacgggtt cgcggggggtg 180
ttcccgagc acaagtacga gatcgtgaag cggctgcagg accggaagca catctgcggc 240
atgaccgggg acggcgtgaa cgacgcgccg gcgctgaaga aggcggacat cggcatcgcg 300
gtggacgacg 310

<210> 2294
 <211> 314
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-F10

 <400> 2294

 gtgcaacaaa ccctaagacc cttgagggga aagccccagc tganggccac catctccaca 60
 cccaagggttg cacctgagac cactaccatc cacattgagg ttgcggcaaa acatgcagta 120
 gttgagaagg tggaggagga caaggaggag gcactaacag tggcggcgaa acaagagcca 180
 gcagccacca ttgagcctca gcagattgct agtgagggtga ccacttcgga agtggcggtc 240
 gtcgttgctg agcctgagaa caaagaagag gaggaagttg tggagaagac cgtcatcgag 300
 aaggagaagc catc 314

<210> 2295
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-037-Q1-E1-F11

 <400> 2295

 cgggtcgacc aagcctccga acaagcctcc ggccaaaagg aaaggaactt agaaatcctc 60
 caaatccttg attcaaataa aacaactcct cctccctccc ctcaataaca acccaaaactt 120
 gtaaccggca ggattctaac aaaaacttaa ttactttatg gacggattgg taggcctctt 180
 gaaagtccgc gtggtccggg gtatcaacct tgctaccgc gacgcaagag gcagcgatcc 240
 gtatgtcgtc ctacggcttg gcaagaagaa actgaagaca agcgtgaaga agagatccgt 300
 gaaccccata tggcaagagg agctaactct gaccgtcaca gatcccagcc aaccactgaa 360
 gctggaggtg ttcgacaagg acaccttcag cagagacgac ccca 404

<210> 2296
 <211> 303
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-037-Q1-E1-F9

<400> 2296

tgtgtttctc ttgcatgagg atcatcatcc tacatgggat caccagctcc tcttccacac 60

gactcgccgg ggcgggatat acgaaaccat caatattatc atccaggatt cagtacatca 120

cctgattcca catcatccgc agcttagatt ctaccctgct tttctgttcg cagctcaatt 180

ccaatatccc aattgcatct caattcaatt caatcaattc tatcaatcgc atcctgccag 240

gcatcatccc taccaactag gctcactaca ctttcactca gattcgcttt tacttatcca 300

acc 303

<210> 2297

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-G10

<400> 2297

ctgctcgccg gccaaaaatc gcctcatcaa caaccccccc ttcaaggctc ccgtctcaat 60

gggtctcctc tcaaacagga ttgggagggg gagcctcaag gcgggggatc atatctactc 120

ctgnagggcg gcgtgggtct acgcgcatca cggaatatat gtgggcatg ataaggatgat 180

ccatttcaca agaggaagag gacaggaggt cggaacagga actgtcgtcg atattattct 240

tgtgagttcc accccaaaac gaagcaaacac gccttgcccc gtgtgcaccg acgaaaccag 300

cgacagcagc acagagacga acggcggtgt atcctcctgt ctcagctgct tcctaactgg 360

gggtgctctc taccgtttcg agtaagcagt caaccggcg ctcttctc 408

<210> 2298

<211> 362

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-E3

<400> 2298

ccccaaagatt ggattcccc ccaaaaacaa caagggcctt ggcccccttc tttccgggct 60

cgccccccgc cggctcttcc ggccccccaa aggtgcaacc cggcccaaca acacaacaac 120

<210> 2301
 <211> 401
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-037-Q1-E1-C11

 <400> 2301

 gcccaaccacg cctccggcca agcctccgca actaacttac caatggtgga accttggcaa 60
 tggtcacact cctccccggc tgccgtcccg gtcttggccg cccggccggc gtctgcaggc 120
 gggggagccg cggcgggtggc ggagatctgc atgaagactc cgtccccga cctgtgcacc 180
 aggacggcgg ggaagcacgc caacaagtac aagggtggtg acgcggtgac ggtgctagag 240
 atgcaggtgg acgcgttcaa gaagcgcgtg aaggcggcgc ggaggctcgc caaggaggag 300
 gtcaagacgg ccgcgacgcc cgaggcgcgg agggcgctga acctctgcaa gacctactac 360
 ctggacgccg ccgacaacct cggcgccctgc aagcgcgcc t 401

<210> 2302
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-H9

 <400> 2302

 gtcgatgacg cctctagagt caatctgcat aatcgccggc accacgaacg gcctgcgcat 60
 caagtcgtac gaggactcca agtcgtcgct caaggccagc aagttcctgt acgagggcat 120
 caccagggac aatgtctcct accccatcat catcgaccag aagtactgcc ccaacaacat 180
 ctgctgcaag tccggcgcc tccaaggtggc cgtcaacgac gtcgtcttca agaacaacca 240
 cggcacctcc aacacgccgg aggccatcac gctcaactgc gccacaacc tgccatgcc 300
 gggcgtgcag ctgctcaacg tcgacatcaa gtacaatgga tccggcaaca agaccatggc 360
 cgtctgcaag aacgccatct gcaagtccat cggcttggga aaggagctcg cctgcatctg 420
 aacca 425

<210> 2303
 <211> 412
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-A11

<400> 2303

acaccctaga ctgagtcgaa gtaacgtccc agctgatgac cctggtgaac aacatctcca 60

tcaggatctc caaccgggag ttccggccgg ggcactgcac gcactacttg aagcactcgg 120

ggctgctcat gaacgtgttc agcaacgcgt tcaaccggga catgagcccc cgccggtacg 180

cgcacgtcga cgtcgacttc cgcaactcgg agcgggactg gtaccagttc aagtggcaga 240

ccacgtcgcc gccgtgggtcc aagctgtgcg ccatgccggg gcgcgtgacg cgcgagggtgt 300

acggccagat gaccgtcgcg acgagcgtca acaaggggat ctactacttc atccagttcc 360

tggagcagct gcacgactga tccatcgtga gatagatcat caagttcaac ag 412

<210> 2304

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-A3

<400> 2304

caggcacagg tccagaagtc gcgggacgca gcaggccaca agtccgggtg attgacccag 60

cgacgacgcc gccgaactcg tcaaccccag gaaaggcacg ctccggcacg ccgtgacccg 120

ggccccggcg ctgtggatca acttcgcgcg cgacattgtg attcaactct ggcaagaact 180

catcgtgaac agcgaaaaga ccatcgaacg gccgcgaacg caagtgcaca tcgttggcgc 240

gcagattacc ctgcagaacg tgcgcaacgt gatcctccac aacctgcacg tccacg 296

<210> 2305

<211> 383

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-B11

<400> 2305

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gaacaacaat tgcaaggtaa attcccgga cctgaattcc cggcggacct tccggttcac 120

cttgtccagg atcaacaaca cggacatgga aatcaagggtg gaccgcctcg gcggaccgaa 180
caagggctac ggcaacttca ccaacagcct ccccgccaac gagtgccgct acgcgatcta 240
cgacctcgac ttcaccacca tcgagaactg ccagaagagc aagatcttct tcttctcctg 300
gtcccctgac actgcacgca ccaggagcaa gatgctgtac gccagctcca aggacagggt 360
caaganggag ctggacggca tcc 383

<210> 2306

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-B12

<400> 2306

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taacaaacca aacaaacctt taacccaaaa ttaacaaagg ccgaattcaa tttccaagggt 120
aaaacctttg gaagggaaaa acaattacaa ctcaaccggt gaatccagat tcgaaaatta 180
agattttggg gccccatta ataaaaacac aattgggttt taatccaatt ggccaagtt 240
cgccaaaaag atgcagatga aaacacgaga ctctgcagct tattacagct gtgacgatca 300
ctttgttggtg gtggacaaaa cagttgacta tggtcgaaga ggatcacctg cagataaaag 360
cagtgcttca gaagtaagaa ctcatgttcg gccactggat gctagcacag cagcccac 418

<210> 2307

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-G2

<400> 2307

acaacactct aaagtgagtc atattaatct tcttgagctc agagctcgag ccaccgatat 60
ggttgctcctt tacttccata aggctgcttc ggtagggcaa aatactttct ttgacgtttt 120
aaaatatgtt gctgcccagt ccccttctcg gaaatcaagg ctgcaccctc atcaggaacc 180
acagcagcag caaccacaag tgcaggtgga gctgcagcag caaccacaag tgcaggtgga 240
gctgcagcag ccgcaaccac aaaaacaagc agcacctggt atgcgcagag gagcatctat 300

tgctgctcgg caagcagcaa tggcacagca atctctggag actatacccg ttccatcttc 360
 acccaagatc aagcgtcaaa catcagggag acctgggttcg gtggcatcca caaagcctgc 420
 agcagctgca ttccacacaa aacc 444

<210> 2308
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-036-Q1-E1-G9
 <400> 2308

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 ctctcccaa gcttttaggat taggatttgg atttggattt ggatttggat cgggtgtgtt 120
 tctgcgtaa ccatgagcga gatcatgaag ctaaagcgtg ggatcagcac caaaccagga 180
 gaccacctcg tccaaaatgg ccaacaacat ccatgtcacg aatgggagga gcaacagcgc 240
 tactggccct cgccgcgggc gccgcgggcg agcccgacgg agtcgcccag gaccccaggc 300
 gggagccaga agaaggcggg tctgggcaag gtgaagagca aggccaagaa atggatgcac 360
 atgtgcatc acaagaagaa acccgcgcca ccggaggaga tgatgtggac ccccaggggc 420
 gggcctggac ccag 434

<210> 2309
 <211> 243
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-036-Q1-E1-H12
 <400> 2309

atcttatgaa agttaaggaa cccttccaac gaatcccga accggactcc cttacacctc 60
 ctctcccta cggaagggtt gccatccctt caccaacgga aacggtggac gtaccgctgc 120
 agcagcggtt catccgctca ggaaccacat tgataccggt cctttttcaa aactccatca 180
 tctcccacca ggattaatcg cactactgca tcctaaacgc gtcacactt ccctgaaaca 240
 act 243

<210> 2310
 <211> 123
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-H2

 <400> 2310

 gtcgacagac ccgtccgcag gatctcgaca tacatcatag ctgagaacgt aggtcccaag 60
 tggacgttga tatgaacaca agtagcaacc ggcgtgttat accggtacag cgacatcgtc 120
 acc 123

<210> 2311
 <211> 165
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-H3

 <400> 2311

 ctcacgggtc gacacacgcc tctaaagaca gtctggggaa gtatcgattt gtcacgggaa 60
 ggtacgccta atgttgagag aaactgtatt cttgtgctcc actttctgca gtgccgacgt 120
 gtaccctttc cgttttacta aattataatt agcttccctt cattt 165

<210> 2312
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-H4

 <400> 2312

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 atctggactc gacagatcat taattttttg ttggcataca ttcccaacct tgatgtaaag 120
 acctccttca ttcagaaccc tgtgttttg aagggtatct cacaatgaag cccaatcagt 180
 tgattacatc ccatgttgat atacataggg tatacccata cgagttccaa ccagagtttt 240
 caatgtctca tgatcttgga ttgaatttgt tttcacaagc cggtacagtg ctgggtactt 300
 cttaagaca tcataggaag atctcttctt ctggaaatgc aatgggtccat ggagctttca 360
 atcgctcaa caagctttcc cgagctctct atttctggct ctc 403

[illegible]

<400> 2313

<210>	2314
<211>	439
<212>	DNA
<213>	Zea mays

<400> 2314

987

<210> 2315
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E7

<400> 2315

tggtgctgtg caaacctcta cactgacttc tggtagcttg tgtccgcctg cctcatcctc 60
atgctcttct cctcctgctg gatcatcttc ccgctgggca ggacggggac catggtgtac 120
ggctgcatcg ccgcgctcgt cttctccggc ttcacatctt acgacaccga caacctcatc 180
agggtctact cctacgacga gtacgtcgcc gccgccatcg agctctacct cgacatcatc 240
aacctcttcc aggccatcct agcgggtgctc gaaggcgtcg actgataggg tcatatatat 300
aacacggccg gctgaggctc atgggctgtg agcatatata cataggatca tatatatgca 360
atctatacat gagctaccac taccactacc cagaaattgg ttccaagctt gcttggcaat 420
ctgttatcca t 431

<210> 2316
<211> 126
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-F11

<400> 2316

gatctgcgtg gacagcctca ccgcaaagcc agagagccag aaggcgaccc cgcgccggct 60
ggcggagctg tgcgtgaaca tcgcgggccga gaagggatcc gggatggcca cgttcgtgca 120
cgggaa 126

<210> 2317
<211> 223
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-F12

<400> 2317

gtcgatgcac gactctaaac tcgactccta tgtaaccact caagtgcac gtcggccagc 60
cgtgctagta gacagcggcc cggtcgggca catactcctc ttcctatata catcggattt 120

ggatgggagg catatatgta cgtgtgtgta atatattatt actacatctt gtactatatg 180
cgacgattgc ttgactgatg aatcacgctt ttaggttag acc 223

<210> 2318
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-F3

<400> 2318

ctcacgggtc gatacacgag tctacatcca tccgtatgag cattgcttcg gtgggtccacc 60
atggcgagc gagcgggtggc cacgatgacg actaataagc cctcctcct cctcgccctg 120
gcggtccgagc tcttgggtgc ggcggcggcc gccggaacg cggcggcgg gggttcagc 180
aactgggtgg cgatgaacca gcagagctac gcgctgtac gcgagaagtc cgtcggggac 240
gggggcaagg agcccctgga caagaagctg tcggaggcgg agaagaagaa ggtcacgtac 300
gtgggtggacc ccagcggcaa gggcgactac accaacatca ccgcggcgct ggaggatc 360
ccggtgagca acaccaagcg cgtgatcctg gatctcaagc ccggcgctca gttccgag 420
aagctgttcc tgaacatcag caaggcgttc atc 453

<210> 2319
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-F4

<400> 2319

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cccgtcggga gaggcggagc ccggcgccg gaggcgagc tcgtccctaa taaatactaa 120
taatttatca ctatgcataa ccaatatata agccatgggc aagcgcagcg tccctcggta 180
ccctgaggac gaggacaaag gcggctgctg cggctgctg tgctgggtgct gctgcttcct 240
gttggttcac gtggcggcgc tggccggcac ggccgctac ttcttcttcg tgtacaagcc 300
caaggcgccg tctactccg tgagcaacat gtccgtctcg cagttcgact tcagcacctc 360
cgacctgacg ctgtacgtca agctcaccg ctcctgctgc gccgagaacc ccaacgagat 420

gatcaccat

429

<210> 2320
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-F6

<400> 2320

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ctcagcttcg gggactggat ggcgcccgaac aagcccaacc caaacgagct caccggcgcc 120
atcgctcggcg ggcccagaaa gaacgacggc ttcgtggaca agcgcggcaa ctctcctac 180
accgagccct gcacctacat caactccctc gccatcgcc cgctcgccgc gctcgccgtc 240
cgaggcgtgc agctcgctgc cagcgagtga tctatcccca tgcgtgcgtg tgtgtccgc 300
tgtttcgttt cttccctgac atgatatgat ttctactcgc ttactgatg 349

<210> 2321
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-F7

<400> 2321

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atccctccaa ggcggacaag ggattccacg gaggagggtta cccggccgcc ggtggatact 120
acggcgccca gtaccccgcc ggcggctacc ctgctccacc gggcgccggt gcgtaccctc 180
ccgggcctgg gtacccggta ccacctggtg ggtaccgcc tccgggtggc taccctcagc 240
ctggcgata cccgcccgtc cagggggcgt acccgccgcc ggggtgcaggc gcgtatcctc 300
ccagcggtga ccccatcaa ccggtctacc cacagcctgg ctatccatcg atgcccggtc 360
atggtggcat gtacggagga ggccacggtg cagggggctc tgcaggccac gggcgcatg 419

<210> 2322
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-F8

<400> 2322

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ggggcacgac ggcgggccgac ggcgggcgagg agggagacga tcgatccaag aggaggtgta 120
tccgtgcgta cgtgtgtgca gcgagcagct agggcatatg cattatttca gaagagaact 180
agctactccg atcaagatga gcgacgaagg attgtacgta tattgctgag aggagatcga 240
agagacggtg atgagttggc ggaagatcga tgcatgctg gatgatcatc acagccaatc 300
gtacgtgtgt aaaaggctcg cgggagggga ataatcgtgc atgagacacc tctctcgctc 360
gctcttcctc tctacgtct taattcattg ggttcgtcga tccgagatcc tacgtacgctc 420
gtcgtttttg t 431

<210> 2323

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-F9

<400> 2323

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ggccctcggc cttgcgcccc agccgctacg ccctcaaggt cttcgacaag cgctccgccg 120
cccgcagcag gaagcctgac gccgaccgcc gcgcgcggtg ggagatcagc gtgctctccc 180
gccttgcgca cccgcacctc ccctcgctcc tcggcttcac cgagacggac gaccttctcg 240
cgtgggcccgt cccctactgc tccggcggcg acctcaacga gctccgctac tcgctccccg 300
accgcatctt cccccccg cgccatccgct tctacattgc cgagatcgct tccgcggctg 360
ccgagctcca cgccgcgggc gtcgtgtacc gcgacctcaa gcccgagaac gtgctcctcc 420
gcgccgacg 429

<210> 2324

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-D11

<400> 2324

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cccgtgccag cagcagtagc agcagccggc gtgtgacgct ggtactgctc ggtctccgcc 120

tgctgcttct ggttgggtgtt gcgcaggcgg tagtggagtt ggtgcctgct gatgataata 180

tcgccgccgc cgctgctggc acggcggtgg acgatggcga gccgcctcag cagtgcgcga 240

ccccggtgag cgtggaggag gcgtgccgcg gcgcgtccga gacgcacgcc ggctgtggcct 300

acgaccactg catggcgctc ctgggcgcgc accgcgcag caaggaggcc ggcaacaaga 360

acatgcacgg gctggcggtg ctggccacca ggatggccat cgaccacgcc gccagcaccg 420

<210> 2325

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-D12

<400> 2325

actcacgggt cgatgcacgc ctctaactctg aatcgtagga aggaagctcg tctccggcac 60

gatccccgac gccgggacca tccacgcgca cggctcggag accgtcacca tccccctcct 120

gctgggtctac gacgacatca ggagcacgta caggagatc gagccccgga gcgtcatccc 180

ctacaaggctc aggggtgggtcc tccacgtgga cattcccgtg gtcgggaggg tctcgtctccc 240

gctggagaag gacggcgaga tcccggtgcc gtacaggccc gacgtcagcg tcgacaggat 300

caagttcgag cagttctcct tcgaggagtc caccgcgacg cttcacctga gcctggacaa 360

caggaacgcc ttcgacctgg ggctcaactc catggactac gaggtgtggc tcggcggcgt 420

gagcatcgcg tccgctg 437

<210> 2326

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-D4

<400> 2326

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accggcacgc aggacaagtg cacggcgtgc gacaagaccg tccacttcat cgacctcctc 120
acggccgacg gcgccatcta ccataagaca tgcttcaagt gcagccactg caaaggggtc 180
ctctcgatgt gcagctactc ctccatggac ggtgtgctgt actgcaagac ccacttcgag 240
cagctcttca aggagaccgg gagcttctcc aagaacttca cgccagggtg caagtcatca 300
gacaaggggtg aactgacaag ggccccaagc aagctgtcgt ctgcattttc tggtagccag 360
gataagtgcg cagcatgcca gaaaacagtg taccgctgg agaagttaac tctggaaggc 420
gagtcctacc acaagagctg cttcaagtgc tcgca 455

<210> 2327
<211> 432
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-036-Q1-E1-D7
<400> 2327

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ctcgcggtg ccgtcgcggt cctggccgcg cggccggcgt ctgcaggcgg gggagccgcg 120
gcggtggcgg agatctgcat gaagactccg tccccgacc tgtgcaccag gacggcgggg 180
aagcacgcca acaagtacaa ggtggtggac gcggtgacgg tgctagagat gcagggtggac 240
gcgttcaaga agcgcggtgaa ggcgggcgcg aggctcgcca aggaggaggt caagacggcc 300
gcgacgcccg aggcgcggag ggcgctgaac ctctgcaaga cctactacct ggacgcccgc 360
gacaacctcg gcgcctgcaa gcgcgccatc ggcttccgcg acgccgtcac catccgcgcc 420
acgatgagca tg 432

<210> 2328
<211> 186
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-036-Q1-E1-E11
<400> 2328

agtcccgttg ttgtcccggc ggctatcagc atcgcgctag ctgtgggggc agtcttggct 60
tcggggttgt ttgggctggg gggcttaggc tcggctctcag gggtcctggg cgtactcggt 120

gggactagtgt gtactgtggg ggggggggtg ggcgacgcta agcgccgtgt ggctgacgca 180
ttaggc 186

<210> 2329
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E2

<400> 2329

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atagacctaa taagaacaga gacgtacgat aacctgctta ttttgcgacc catcccgttc 120
ccacgcaaag gcgcccagcg tgatctccgt ccgtgccgcc atggcctcgc accgggcgct 180
gctgctgctg ctectcgccg ccgcgctcgt cgctgcgctg gcctctgtcg catccgccga 240
cgacgccatc gccatgcccc tcatectgac ccccgaggcg cataccccgc tggggtcctt 300
cgacggcgac aagccggcct ctgacgacga cgccgtcgac gacgacgagg acgccgcccc 360
tgtcggcgcg cccaacgggg ccaccatgac tgagcccaag gacgacgtcc ccgccgcgcc 420
cg 422

<210> 2330
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E3

<400> 2330

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cgtcgtcgcg gtggtcgtcg gcgttgctgc caccgtcacc cactccggca agaaggccgg 120
cgacgacttc accgtcccgg gggaagcctc cattgccacg tccggcaagt cggtcgagtc 180
cctgtgcgcg cccacgttgt acaaggagtc gtgtgagaag acgctctccc aggccaccaa 240
tggcaccgag aacccaagg aggtgttcca cagcgttgcc aagggtggcg tggagtcggt 300
gaaaacagcg gtcgagcagt ccaagacgat cggcgaggct aaggccagcg actccatgac 360
cgagagcgcg cgagaggact gcaagaagct cctcgaggac gccgttgacg acctcagggg 420

catgctcga

429

<210> 2331
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-036-Q1-E1-B7
 <400> 2331

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 ccaggggagg atctcaatga atggctagct gttaacactg ttgatttctt caaccagggtg 120
 aacatcctgt atggtactct aatggagttc tgcacaccag ctacatgccc aacaatgtca 180
 gctggaccaa agtttgagta tagatgggcc gatgggggtgc agatcaagaa accaattgag 240
 gtttcagcac caaagtatgt tgagtacttg atggattgga tcgaagctca gcttgatgac 300
 gaatccatct tccctcagaa actcggaacc cttttccac aaaatttcaa ggaagttgtg 360
 aagacaatct ttaagcgact tttccgtgtt tatgctcata tttaccactc acattttcaa 420
 aagattgt 428

<210> 2332
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-036-Q1-E1-B9
 <400> 2332

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 tgggcacgat tacaactaat tcgtgggtca tcgtattagc tgtggcggtcc gcgatcggtg 120
 cagcgtcggc tgccgacgcc aatacaccga gcagagcgtt cagcacctga ttaccgatca 180
 accatgagtg ctcaacacta gtaccacaga agtccgtctc agatcgtagg taggagcccc 240
 ttcactacag actgtctcga agcgcaacat cgagagtcac atgattgatg aagtccacaa 300
 gcacagggtg atagaccaat atctctgccg cgctaaagga tatcccggta agcaacacca 360
 atcgctgat gttgcatttc aagacctgaa cttacttacg ctaaaaggta 410

<210> 2333
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-C10

<400> 2333

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ttgaggcgat caaggcaaca gggcggtgca acctgttcct cgtcggacag ggcacgccct 120
gcatgccgct gggtgactgg agcacggaca gcccgagct cgggccggtg ggtacttacc 180
tgccgctgcc ggaattctcg acggtggcat ctgtgctggt catgaaacag tacgatccga 240
tgccgaagca cgacgacttc gtcgaggagg tggccgacat agcgggtggac gttgacacgc 300
cgggccccag taaccgggga aacaatacta gcttccatgc cggatgatac gtgctggtgt 360
tagatgtatt attaacatgt cgagcagaca agactgatta acattatg 408

<210> 2334
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-C4

<400> 2334

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aatcttctaa agaatgtcga agaggactac ttcacagctc tgcaaagttc acctgccccca 120
gtataatgaa gaaactgata aatatctaaa aggggaacatg caaatcaagg tgtaaacttt 180
aacagtgcc aaaaatctggc agttttgggt gaggagattc tacctgccat ttttcgggttt 240
gtacatagga gcctgtaaca tttgtgggtt tttttatatg ggccaggata gaactttctcc 300
attgtttgtt caaggcaagc agaattatcg cctgcatggt gtatttttgta taaatgttca 360
tcctttaact aaaactcaga agtgaagatt gatataaaga aagaaaagag gaagaccagg 420
gaggagggga 430

<210> 2335
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-C6

<400> 2335

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 ttggacaccg ccaccgacct gacgtggatc aactgtcgtc tgcggcgccg caagggcaag 120
 cactatgggc gacagtcgat ggggcagacg atgtcgggtg gcggggaagg cgcgacggcg 180
 gcgaagaagg aggcgagcaa gaactggtac cggccggcca agtcgtcgtc gtggcgacag 240
 atccggtgct cgcagaagga gtgcgcggtg ctgccctaca acacgtgccca gagccccagc 300
 aaggcagagt cgtgcagcta cttccagaag acgcaggacg gcacggtgac gatcggcatc 360
 tatggcaagg agaaggcgac ggtgacggtg tcggacgggc ggatggccaa gctccccggt 420
 ctcatcctgg gctgctc 437

<210> 2336

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-C9

<400> 2336

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 ctggtggcga cgtgcatcgc cgtgtacgcc aactgggagt tctgcaagat gcagggcatc 120
 ggctggggct ggggcgggcg catctgggcg ttcagcgtcg tcacctactt cccgctggac 180
 gtgctcaagt tcgccatccg ctacgcgctc tccggcaagg cctggaacaa catcaacaac 240
 aagacggcct tcaccaaccg caccgactac ggcaagggcg agcgagaggc gcagtggggc 300
 acggcacaga ggacgtgca cggcctcaac caggccaccg ccacctccga cctcttcggc 360
 gacaaccagg gctaccgcga gctgtcggag ctcgccgag 399

<210> 2337

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-B2

<400> 2337

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gcatccggtt cagccgcacc aagggtccaga cgtctataaa aggagcccag gtcactaggg 120
tttagttttg acgccccacc ccggtgcaca agcgggggacg agtaccgaga ggagcacgac 180
gatggcggtt cccaaggggc gcgcacgacg gctcccccaa gcgcacgacg gtgacggttc 240
ctgaggtgca catgtggtgg ctgctctcca aggcgcatgt tggcgacggg tccaagagg 300
cgcgcgcggc tggctctcag gaggcacgaa tagcggcggt ggccagaagc atgcacaggc 360
agcaacacct ccctgttggtg agtgtgacag taagggcctc tacctcaaac tattttcgag 420
ctccgacgaa tcggacgcca 440

<210> 2338
<211> 407
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-035-Q1-E1-H9
<400> 2338

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ccgctctgct ggtgttcgcc gcggtgtcgc ctgccgcgcg cgcggtggcg gcggaggcgg 120
aggcgaaggc gaaggctgtg ggaggcgcgc cgtcgggtgcc cgctgggtcg ctggacatcg 180
cgcagctggg cgccaagggc gacggcaagt cggacagcac cccgatggtg ctcaaggcgt 240
ggaagcacgc gtgcgaggcg acggggcagc agaagatcgt catccccaag ggcaactacc 300
tgacgggcgc gctggacctg gtggggcccct gcaagtcctc catcatcatc cgctcgcacg 360
gcaacctgct cggcaccggc gaactcaacg cgtacaagag gaactgg 407

<210> 2339
<211> 382
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-036-Q1-E1-A3
<400> 2339

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gtcaacgtgg actacgccg cacgaacaac aaaaccatgg tcgtctgcac caacgccaaag 120

ggcaccgcca agggaagcat ccaggcactg gcttgccctgg tctgatgatg accttccttt 180
 tgcattgatg catggtatct catccttgat gatgatctag ctcattactt ctttttaatt 240
 tcggcttcat tcgcttttcc aaattcgatt gtgtttcagc caagttgttt aacgggacat 300
 ctcttgatc atcttctctgc tacatagact tggactccta tatatacagg ccttccagca 360
 catataacat acgtcggacc aa 382

<210> 2340
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-A5

<400> 2340

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 ctccccgcc ggccaacaac tcagccgccg caaccgccac atcagccatg ggcgccctgcg 120
 caaccaagcc caagacgctt gagggggcagg cccagctga ggccgccgtc tccacaccca 180
 aggttgccgc cgaggccact ccaatctccg ttgaggttgc ggctgatgaa caggtagctg 240
 agaaggtggt ggtggaggag cgggctgcgg cggccgacgt tgagcatcag aaggctaattg 300
 aggtggtcgc tccagaggcg gccgtcgccg agcccgatca caaggaggag gaagccgtgg 360
 agaagaccgt cgtcgaggag gagaagccag cggcagccgc caatgc 406

<210> 2341
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-A6

<400> 2341

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 cgcgtcgtcc atgtgatcgg cgtgcgaccg caagccaaag gcggccacca aagcggaccc 180
 ggctgggacg gcctcatcga tctccggtgg tagcggcagc catgaagctg gcgcagagga 240
 agcagcggta gaggaggaag tggtagggct gtcgccggag ctggcgatgc acggcgccat 300

cgagccggtg gcgctgccgt cgtcgacgtc gaggcggcgg ctgtccatca acgtgagcaa 360
gaagctgata ctgaatatct cggacaagct gcggctgacc cggcaggagc acaacga 417

<210> 2342
<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-036-Q1-E1-A9

<400> 2342

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acaagacaga agaataactcc catgacgcc aatacaaatt caacatttac cctgagcaaa 120
tcccttctctg gcttggtgac tggattcctg agaaaggagg ttaccttata gggaaatctgc 180
agccagctca catggatttt aggttcttct ctcttggcaa cctttgggcc atagcttcgt 240
ctctaactac tccaaaacaa gctgagggaa ttcttagcct tattgaagaa aaatgggatg 300
atcttgtagc aaacatgccc ctgaagatat gcttcctgc aatggaagat gatgaatggc 360
gcattattac tggcagtgat cctaaaaata ccccatggtc atatcataat ggtggatcnt 420
ggccaacctt attgtggc 438

<210> 2343
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-B10

<400> 2343

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tgggtgtcgt ccttgcagcg ctgcgcgcg gcgggtcatg cgggcccccg aaagtgccgc 120
ccggtcccaa catcaccacc aactacaacg gcaagtggct caccgccagg gccacctggt 180
acggtcagcc caacggtgcc ggcgctcctg acaacggcgg tgcgtgcggg atcaagaacg 240
tgaacctgcc accctacagc ggcattgacg cgtgcggcaa cgtccccatc ttcaaggacg 300
gcaagggctg cggctcatgc tacgaggtga gatgcaagga aaaacctgag tgctcgggca 360

atccagtcac ggtgtacatc actgacatga actacgagcc tatcgctccc taccacttcg 420

<210> 2344

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-B11

<400> 2344

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ctggacgtgc acgtcggcca ctgcctctcc gtgctggtcg acgccgacca ggcgcccggc 120

gactactaca tgggtggcctc cacgcgggttc atccacgacg ccaagtccgc ctccgcccgc 180

atccgctacg ccggtccag cgggcggccc cgggcgccca acatgaccga gccaccggcc 240

ggctgggcct ggtccatcaa ccaggccagg tcgttcgcgt ggaacctgac ggccagcgcc 300

gcgcgcccc aaccgcaggg ctctaccac tacggccaga tcaacatcac ccgcaccatc 360

aaggtcatgg tctcccgagg ccacatcgac ggcaagctcc gcta 404

<210> 2345

<211> 436

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-035-Q1-E1-H4

<400> 2345

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cctcgattcc ggcgacgacc ttgcgcgtca tcttatccgt cctcttctgt gccgcggctg 120

gcaccgccgt cgacaacgac ctccccgact acgtcatcca gggccgcgtc tattgcgaca 180

cctgccgcgc cgggttcgtg accaatgtca ccgagtacat cgcgggcgcc aaggtgaggc 240

tggagtgcaa gcacttcggc accggcaccg acgggaacgg cacgtacacg atcgagctca 300

aggacagcca cgaggaggac atctgcgagg tggctctggg ggagagcccg cgcaaggact 360

gcgaccaggt gcaggcggac agggaaacgc cgggcgtcct gctcnacang aacgtcggca 420

tcagcgacaa cctgcg 436

<210> 2346
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-G4

 <400> 2346

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 ggcggtggcg gagatctgca tgaagactcc gtccccgcac ctgtgcacca ggacggcggg 180
 gaagcacgcc aacaagtaca aggtggtgga cgcggtgacg gtgctagaga tgcaggtgga 240
 cgcggtcaag aagcgcgtga aggcggcgcg gaggctcgcc aaggaggagg tcaagacggc 300
 cgcgacgcc gaggcgcgga gggcgctgaa cctctgcaag acctactacc tggacgccgc 360
 cgacaacctc ggcgcctgca agcgcgccat cggcttcgcg gacgcccgtc acatcggcgc 420
 cacgatgagc atggtggcgc aggacacgca 450

<210> 2347
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-G5

 <400> 2347

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 gacaaccagc ctgctggcgc tggcgctggc agcgtggct ttcgtctcca gggccgcggc 180
 gcagggcaac ggctgttcca gcgtgatgat gaccctggcc ccgtgcatgg acttcatctc 240
 cagcaaggcg tcggagccgg ggatctcctg ctgctcgggt ctggccggag tcgtgcagac 300
 cgacccccgc tgcctctgca tggctactgga cggcactgcc acgtccttcg gcatcgccat 360
 caaccagacc agggcgctgg agctccccgg cgtctgcaag gtcaaggcgc cgccgctcag 420
 ccagtgcaca ggcgtccctg c 441

<210> 2348
 <211> 433

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-035-Q1-E1-G6
 <400> 2348

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 cggcatcagc gacaacctgc gcccgcgcaa cccgctcggc tacctcaagg acgtgccgct 180
 gcccatctgc gcctcgctgc tcaaacagtt ggactcggac gacgacgacg atcagtaata 240
 gcacatcgac gacgacgacg gatatgtaat agcacgtcgt cgacgaccga ccgcagtcgt 300
 cgcagactgg ctggcactaa accacaaatc ctcttcacct ggattacaaa tatgttaactg 360
 agaaaggaaa ggaaaacaaa aatgttaactg cgtggctgtn acaaattctg agtgctggat 420
 tcttgctatt gtc 433

<210> 2349
 <211> 415
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-G7
 <400> 2349

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 ggagctgtcc tattcttgtt tctcctcgtc gcagcagagg tgggaaccat cgatgcaaaa 180
 atgggagtag ccatgccccat gcatgccttg ataatggaga aagcgaaaca gcaggagacg 240
 gagaagaagg aggagaaaag cacggagaag gaagagagtc aatgcttata gccgagtctc 300
 cagttcgagg gcttctgctt caacagcgac agatgcgccg atgtgtgcat gaaggagagc 360
 tttcccggtg gcgagtgcaa gcaggctcgtg gccacgcgca agtgcttctg caaga 415

<210> 2350
 <211> 456
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-G8

<400> 2350

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ctcctccgac tcagcatggg cgccgtcgtc ctggctgcc a tcgccacagt agtgctcgcg 120
gaggaagccg atccgcgggc actgccggca cagtggacca ccgcgaagaa gtacaaggcc 180
acgatggacg ccaagacgcg gcaggctttc gacggcgtgg tggccgccgc tacggcagag 240
aagcgggtccc aggcgggtgga ggccgtgctg cagcagcagc tgaacatgga cgtgtccctg 300
tccaaggcga cgtcttccgg ggacgagaac aactacgtga gcgtggccgc cgcctacgag 360
aaggccgcgg gcgcggtcat cgcggcgacg ccggacaaca agctccgcgc tatggcggtc 420
gcgttcgacg gcgcgggtggc gccggacccg ggccgg 456

<210> 2351

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-G9

<400> 2351

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ctcaacatct tcaagccgcg gaacgagcac gactacttcc acaacgcgaa ccaggaggag 120
gatgtgatgc cccggggccag cgaccagcag aacctcataa cggcgccggg gaccaagagc 180
ggcctcatga aggtgccgcc ccggtccgcg ccaccgcgg ttgcgcagga cacgggtggtg 240
ctccccgtgg acaacgcgcg ggggttcccc ggcgcttggg ccatcatcag cgagaacgcg 300
ggcgtgtccg cgatgcacct ggtgatcatg cggagcgaca aggccatcat gttcgacacg 360
gtcaccacgg ggccgtcgct gctgcggctg cccaagggga actgccgcct cga 413

<210> 2352

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-H1

<400> 2352

CCGCGGCGGT CGACACACGC CTCTAGATCG AGTCCAGCTA TGGCGGCCAA GGTGTTCTCTC

agcaccgcat tcccacagtt caagacagag gagatgacca acatcatgaa ggacttcgac 240
gagccccgggt tcctggcccc gaccggcctc ttctctggcc ccaccaagta catgggcatc 300
caaggcgagc ccggcgctgt catccgcggg aagaagggat ctggaggcat aactgtgaag 360
aagacagggc aagcgatggg ggtcggcatc tacgacgagc ccatgacccc cgggcagtgc 420
aacatggggg ggc 433

<210> 2355
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-H2

<400> 2355

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tgcatgcgtc gccgtggctg gggacacaga ggaggagatc gaggagatg gagtgcctgc 120
tggtgctgct caagggttatg gtggtacaat gagtgcacct gaccatctgc gacgccctca 180
cccacaccag cgacccctac gtcttctctc gcctcggaca gcagacagtc gcatcaagtc 240
tgtcataccc catgatcgat ctgctgcagg acgagctgct catgctgttg tcccagtcca 300
tggtgacgtc gtccggggat gagcactact acctgagcat ggccaccgcc tacgagaacg 360
ccgcgggcgc cgtcatcgcg gcga 384

<210> 2356
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-E6

<400> 2356

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gccgtctcc gcctcggctt ctctctctc ctctggtgcc cggcgctcgc gccgtggtc 120
tccgcgcagc tctctgcaga tttctacaag acgtcgtgcc ccgacgccga gaagatcatc 180
ttgggcgtcg tcgagaagcg gttcaaggcg gaccccgga ccgccgccg cctcctccgc 240
ctcgtcttcc acgactgctt cgcaaacggc tgcgacgct ccatcttgat cgaccccatg 300

tcgaaccagg cctccgagaa ggaggcgggc cccaacatct ccgtaagggt ctacgacgtg 360
 atcgaggaga tcaagacgga gctggagaag gagggtccca acgtggtgtc gtgcgcggac 420
 atcatccccg gtaacgcggg cgactc 446

<210> 2357
 <211> 406
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-E8
 <400> 2357

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 agataaataa agatgaagaa agtggcatca tcgtcagccg ttctcttcgt gctagccctg 120
 acgctagttt gtgccccgct gatagcagag gcaaagaaga agagagtcgc cgccgccgcc 180
 gccgaggaga agaagggtgca ggacaacttc tgctcgacgc tgtgcgaggg caggaagggg 240
 atggacctgg tgggtgtgca ggagtcctgc gacctctcac agcgctccaa cctggtgctg 300
 tacggccgga tccagtgcaa gggcaagtgc accgagcaga agggcatcac cgcgccgcag 360
 atgaagggtg gccaaagggc gtgcgacaag gactacgtgg tcaaag 406

<210> 2358
 <211> 385
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-E9
 <400> 2358

ggtcgatgga cgcgtctaca ctaagtcgac gaacagggtt aagacccttc tatggcttgc 60
 cttgtcccg cttgccgctg cccgccgtcc ccgctcgtc cgcaagtcga tttcccgag 120
 cgatgttga cagctactag cactcggaca cattgatcgt gctctccacc gtgcagagca 180
 gctcatagag gaggacaaca tgctggaggc gttcaacata atagagctac actgcaatcg 240
 cctcattgag tgcgcaaagc agctagacaa gcccacatgaa tgtggtgatg acattcgga 300
 ggcagccgcc gggatcatgt ttgcagctgg gaggtgcggc gacctgccg agctgacgtt 360
 tgcacgaacc atactgacaa acaag 385

<210> 2359
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F11

<400> 2359

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 gggaggggagc tcgggttctt gttgggtttt cctttgggtg gagagcgagg gagcgagtc 180
 gagagccagc gagcagtctc tcgtgcagtg cagtgcagtg cagtgcagct ccggcgtaga 240
 tgagattgta ttgtgaccaa gccgggaggg aaagcagga ggggaggaca aagatgtttt 300
 gtcacgtttc aggtctccggc catcgccgga gtttgtccgg ggaatatatc gatttcctat 360
 tagaaatccg caaaaaaaaaa ggaagaagaa agagaggaag agtat 405

<210> 2360
 <211> 456
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F2

<400> 2360

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 cttgttcctc ctggctcctc tctgcatcgt gcatggtgag aaggaagagt caaagggcat 120
 cgatgcgaaa gcgtccgggc ctggtgggtc cttcgacatc accaagttgg gcgcctccgg 180
 caatggcaag acagacagca cgaaggctgt gcaggaggca tgggcatcgg cgtgcggcgg 240
 cactgggaag cagacaatcc tcatacccaa gggcgacttc cttgtcggac aactcaactt 300
 cacaggccct tgcaagggcg acgtgaccat ccagggtgat ggcaatctgc tggcgaccac 360
 ggacctaagc cagtacaagg accatggtaa ttggatcgag attctacgcy tggaaaaacc 420
 tggatcatcac cggcaaggga aaccttgacg ggcagg 456

<210> 2361
 <211> 418
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F6

<400> 2361

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tgagactgag accgacagta gcagcggaga atcttcttcg tcgtcgtcgt cggaagaggc 120
cggcgagaag gagaaggaga aggagcagga gatggagaag gcggtcgcgg cggagaaggc 180
tgcccagcag gagctgctca agtacgcaa ggagaagggc atcgtgtcac cgaccaacgg 240
cacgggggtg tacaaggga tcgcccggga gttcgtggac gccacaacg agctccgcgc 300
gcgctacggc gtgccgccca tgaagtggga caggaagctg gcgcggcagg cgcggcgctg 360
gtccaaccgc atgcgcaagg actgcgagct cgtccacagc ggccacaagt acggcgag 418

<210> 2362

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F7

<400> 2362

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acaaataata aggaaaggtc ccgccctttt cctccgacat ccacaagggg ggaggggaaa 120
acacgtacat tcaccgggcg gcaataatgg cctcggttcc ggctccggcg acgacgaccg 180
ccgccgtcat cctatgcta tgcgtcgtcc tctcctgtgc cgcggtgac gaccgaacc 240
tccccgacta cgtcatccag ggccgcgtgt actgcgacac ctgccgcgcc gggttcgtga 300
ccaacgtcac cgagtacatc gcggggcgcca aggtgaggct ggagtgaag cacttcggca 360
ccggcaagct cgagcgcgcc atcgacgggg tcaccgacgc gaccggcacc tacacgatcg 420
agctc 425

<210> 2363

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-F8

<400> 2363

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catcaccggc gtgacctgcg gccctggcca cggcatcagc atcggaagcc tagggcggta 120

caaggacgag aaggacgtca cggacatcaa cgtcaaggat tgcactctta agaagacgat 180

gttcggcgtc cgcacaaagg cgtacgagga cgccgcctcc gtgctcaccg tctccaagat 240

ccactacgag aatatcaaga tggaggactc agccaacccc atcttcatcg acatgaagta 300

ctgccccaac aagttgtgta ctgccaaagg cgcctccaag gtcaccgtca aggacgtcac 360

cttcaagaac atcaccggca cctcctccac cccggaggcc gttagcctgc tctgcactgc 420

caagggtccc atgcaccgcc gtcacaatgg a 451

<210> 2364

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-C9

<400> 2364

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ccgccgccgc cgccacaagc gaccgcgcac ccgctcttct cctcccttc gctctcggcg 120

gccggcgatg ggggagaccg tacgggcggg cgacgttgca atcacgactc acgagatgga 180

gagccacaac ccatcgcaact ctcagatcgc cgaagtgcg atggacatcg cagcgtcagc 240

ttctggagcg gcagggagca agttctgcaa gggcgcagcc tgcgacttct ccgacgccag 300

caactcctcg aaggacgcca gggagaggtc ggcgtcgatg aggaagctga tagtcgcggg 360

ggtcctctgc gtcgtattca tggcggtgga ggtggtgggg ggcac 406

<210> 2365

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D10

<400> 2365

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gtcaccctgg tgtcggcaaa tgacctcaag aaagtgtcgc tcttctcccg gactcgcac 120
 tacgccgtgg cttccatctc cggattcgac ctccgcatcc cttcccacag cacccaagca 180
 gaccacagca acgggtgcaa cccctgctgg aacgccgtgg tacacttccc catcccggct 240
 gccgctgaca cccgcggcct cgcactccac gtgaggctcc gcgcccagcg tctataacctg 300
 ggcgatcgcg acatcggcga ggtgtttgtg cccatcgacg acctcctggc cggcgccgac 360
 aagggtggcg atccgaggcc cgtgagctac caggtgcgca agccgcactc tggccgcgcc 420
 ca 422

<210> 2366
 <211> 367
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D11

<400> 2366

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 acccaataat ccgatccac agaaactttt ctctcggtcc gttcgatcga tcgctgccgt 180
 gtcgtttgcc agacaccatc agcaccctaaa accatggcct gcaacctggc tcagtgcgcc 240
 accgcccggc cggcgaccgt cgcgccccgc accctcgcc ctgctgcgtc cgcgtccgtc 300
 tccttctccg cgaggaagcc ggcggggcgc agcctgcggc tgcagcggca ggcgtgctgc 360
 gagccgt 367

<210> 2367
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D12

<400> 2367

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 atccctcgct aataacatca tggctcgtggg cgccgtcctt gcggcgcttg tcgtcggcgg 120
 gtcgtgcggg cccccgaagg tgccgcccgg cccaacatc accaccaact acaacggcaa 180

gtggctcacc gccagggcca cctggtacgg tcagcccaac ggtgccggcg ctcttgacaa 240
 cggcgggtgcg tgcgggatca agaactgaa cctgccaccc tacagcggca tgacggcgtg 300
 cggcaacgctc cccatcttca aggacggcaa gggctgtggc tcatgctacg aggtgagatg 360
 caaggaaaaa cctgagtgtc cgggcaatcc agtcacgggtg ttcattcacag acat 414

<210> 2368

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D3

<400> 2368

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 gggcaaaaat ggcaaaggct ctcttaggtg gcctatcggc gatcctcgtc gtggcgggtg 120
 tcgtcgggtg ggtcgccacc gtcacccgct ccggcaagaa ggccggcgac aacttcacgg 180
 tcccggggga ggcttccctt gccacgtccg gcaagtcggg caagtccttg tgcgcgcca 240
 ccctatacaa ggagtcgtgc gagaagacac tgtcccaggc caccaatggc accgagaacc 300
 ccaaggaggt gttccacagc gtggccaagg tggcgctgga gtcgggtccag acggcgggtc 360
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<210> 2369

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-D6

<400> 2369

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 aaggaaggca gaggcaaaag cagccatggc gaactcgtcg tccggccttg cgggtgaacga 120
 cgagtgcagg gtgaagttcc gggagctgaa gtcgcggcgg agcttccggt tcatcgtgtt 180
 caggatcgac gacacggaca tggagatcaa ggtggaccgc ctccggcgac cgaaccaggg 240
 ctacggcgac ttcaccgaca gcctccccgc caacgagtcg cgctacgcga tctacgacct 300
 cgacttcacc accatcgaga actgccagaa gagcaagatc ttcttcttct cctgggtcccc 360

tgacactgca cgcaccagga gcaagatgct gtacgccagc tccaaggac

409

<210> 2370

<211> 244

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-E12

<400> 2370

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ttcttaggcc gccctctaca cttctcgaca taaccatcga gagggcggtc gagagaaacg 120

agagcggcgg acaccatggg gagctcgagg accatcggtg cgtcccgctt gtcctcctc 180

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gggg 244

<210> 2371

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-E2

<400> 2371

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gaagtaacac ttctccgtga ggctgagcc cctcgccgcg gtgagccaag ccggcgcacg 120

tcgccccggg gtcacgctc accaccgagc cccaaccaat taataatata tatatatagc 180

taggatcgat cgtcagtaaa atggcaggct ccgccgtcct gaggagcccc ctgtccgtcc 240

tcctctacat cctcgccgcc gtgcccgcga ccgccggggc gacgccgacc gacgccgcca 300

tcgacgaggc gtacgcgcat ctcgtcaacc tcaccgcgaa tcaggagtac tgggcggagc 360

gcgcggaggc ggcgcacgcg taca 384

<210> 2372

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-E4

CCGAGGAGGC

<400> 2372
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 cggaggaagc cgatccgagg gcaactgccg cacagtggac caccgcgaag aagtacaagg 180
 ccacgatgga cgccaagacg cggcaggctt tcgacggcgt ggtggccgcc gctacggcag 240
 agaagcggtc ccaggcgggtg gaggcgtgc tgcagcagca gctgaacatg gacgtgtccc 300
 tgtccaaggc gacgtcttcc ggggacgaga acaactacgt gagcgtggcc gccgcctacg 360
 agaaggccgc gggcgccgtc atcgcggcga cgccggacaa caagctccgc gctatgg 417

<210> 2373
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-B3

<400> 2373
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 ctcagccaac cccatcttca tcgacatgaa gtactgcccc aacaagttgt gtactgccaa 180
 cggcgccctc aagggtcatc tcaaggacgt caccttcaag aacatcaccg gcacctctc 240
 caccgccgag gccgttagcc tgctctgcac tgccaaggtc gcatgcaccg gagtcaccat 300
 ggatgacgtc aacgtcgagt atagcggcac caacaacaag accatggcta tatgcacgaa 360
 cgccaagggc agcaccaagg gttgcctc 388

<210> 2374
 <211> 446
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-B6

<400> 2374
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 agataaataa agatgaagaa agtggcatca tcgtcagccg ttctcttcgt gctagccctg 120

acgctagttt gtgccccgt gatagcagag gcaaagaaga agagagtcgc cgccgccgcc 180
gccgaggaga agaaggtgca ggacaacttc tgctcgacgc tgtgcgaggg caggaagggg 240
atggacctgg tgggtgtgcaa ggagtcttgc gacctctcac agcgctccaa cctgggtgctg 300
tacggccgga tccagtgcaa gggcaagtgc accgagcaga agggcatcac cgcgccgcag 360
atgaaggtgt gccaagaggc gtgcgacaag gactacgtgg tcaaggcggg ctgaggtcac 420
aaggcctgca acaacaactg cgccaa 446

<210> 2375
<211> 399
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-035-Q1-E1-B9
<400> 2375

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gcgaggaggg ctcgcggcag cggcaggggc tccggtgttt ttgttccaga atctgtagca 120
aatggctgac ggcgaggaca tccagccctt tgtttgtgac aatggaactg gcatgggtcaa 180
ggctggtttt gctggtgacg atgcgccaa ggctgttttc ccaagcattg ttggacgccc 240
acgtcacact ggcgtgatgg ttggcatggg gcagaaggat gcgtatgttg gcgatgaggc 300
tcagtccaag aggggtatcc tgactttgaa gtacccgatc gaacatggca ttgtcaacaa 360
ctgggatgat atggagaaga tctggcanca caccttcta 399

<210> 2376
<211> 408
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-035-Q1-E1-C10
<400> 2376

gtcgatgcac gcctctacac tgagtcttat taataaggtc ccgccctttt ccgacattca 60
cagggggggac aggaaatcag cggccatggc ctcgattccg gcgacgacct tcgccgtcat 120
cttatccgtc ctcttctgtg ccgaggctgg caccgcccgc gacaacgacc tccccgacta 180
cgtcatccag ggccgcgtct attgcgacac ctgccgcgcc gggttcgtga ccaatgtcac 240

<210> 2379
 <211> 454
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-C6

<400> 2379

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 gtctacccta ccgtaccagc tagccaccac acgcgtagcg cgggaaatgc cggcggcggc 180
 ggccatgacg acgaggcggg tgggtgctgga ggtgctacgg tcggcctccc gcgacgcctt 240
 ccaggtggcc ttctccttcg cggcgaggcc gcccggtgcc accatgctca agccggccat 300
 caccaagccc ctctaccacc accaccacga caacgactaa tctggcgag atctacagca 360
 cggccgtcgg catgccttca cagcccggcg ggtgtgacga ctattgatga cgtactacca 420
 catttcgtcg ctctaatcc agtaagcaac gcaa 454

<210> 2380
 <211> 450
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-035-Q1-E1-B2

<400> 2380

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 gccccatggc cgccatggct cgttccgtct ccctcgtcgt ggcgcccctt ctctcctct 120
 ccctcctcgt ctccgccgag gccagtgcgc ggaccgtggg cgacaccgtg caggacgcgt 180
 gcagcaagac ccagttcccc aagatctgag tggacagcct cgccgccaag ccggagagcc 240
 agaaggcgac gccgcgcaag ctggcgaggc tggtcgtgaa catcgcggcc gagaagggat 300
 ccgggatggc caccttcgtg caccgcaagt acagcgacaa ggaggacagc gacatattca 360
 agtgctacga cagctgctcc gacgacgtgg aggaggccgt cgnccactc aacggcctcg 420
 tccgggagcc caccgacgcc aagttcctcg 450

<210> 2381
 <211> 96
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-H8

 <400> 2381

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 ggctctggac aggaacagga caggacctca aaatct 96

<210> 2382
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-H9

 <400> 2382

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 ccgtgacgat cggcatctat ggcaaggaga aggcgacggt gacggtgtcg gacgggcgga 120
 tggccaggct ccccggtctc atcctgagct gtcctgcctt ggaggccggc ggcagcgtgg 180
 acgcccacga cggcgtgctg tcgctgggga acggcgacat gtccttcgcc gtccacgccg 240
 ccaagcgctt cgggcagcgc ttctccttct gcctgctcag cgccaacagc tcccgcgacg 300
 cctccagcta cctcaacttc gggcccaacc cggcgggtgat cgggccgggc accatggag 359

<210> 2383
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-035-Q1-E1-A10

 <400> 2383

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 ggtgtcgtcg ggcgccgcca agcccaagtg cgtggccggc gccaggaacg accacgcgtg 120
 ccgcgtcggc gccgtgcacg acccggacag ccaggaggag gagggctcca gcgtcaccat 180
 cgacgcgccc gccgccgcgc ccgacgacgt cggccacgac gacggcagcg actacaacga 240

ccccgacgtg cccaacaacg accagctcgt cgtcgtcggc cactgaaagc tgccgcgcgc 300
 gcgcgcgcgc cgacccgtgg accatgcgtg catgaagaag aatgcagggg gtgggcctgg 360
 gcctgtaacc tgттаатgga tcg 383

<210> 2384
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-035-Q1-E1-A11
 <400> 2384

ctcgttggac cacactacac tgagtcgtaa tacaacatgg ctgtgaatgt gagaaccatg 60
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 gcatggtgcg gtcctcccaa agtcccccca ggcaagaaca tcacggccac ctatggcaag 180
 gactggttgg acgctaaagc gacatggtat ggcaagccga cgggtgccgg tcccgcgcgc 240
 aacggtggcg gctgcgggta caaggacgtg aacaagcccc ccttcaatag catgggcgca 300
 tgcggcaaca tcccctctt caaggatggg ctgggttggtg ggtcctgctt cgagatcaag 360
 tgcgataagc ctgtggagtt ctccggcaaa cccgttggtg gtgcacatca cg 412

<210> 2385
 <211> 399
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-035-Q1-E1-A7
 <400> 2385

ctcgcggggc gatacaagcc tctacagtga gtcgtagtac ccatcctctg catcaataac 60
 tgtggcttct tcggcagcgc ggcgaccatg aacatgtgct ccaagtgccca caaggagatg 120
 ataacgaagc aggatcaggc caagctggct gcctcctcta tcgacagcat cgtgaacggc 180
 agcgacgccg tcatggagcc gggtgttgct ggagcaaca cggtagtagc tgttgcccaa 240
 gttgagttgc aaacaatgaa cgtgcagcag cccgctgatg ttgccggacc cagcgagggg 300
 gtggcgggca tctccaaagg ggggaaggta nggccgaacc ggtgcagcgc ctgcaggaag 360
 agggttggac ttacgggatt caactgccgg tgtgggaac 399

<210> 2386
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-A9

<400> 2386

acgcgcgggt cgatacaaga ctctagactg attcgtagta tctcactatc caccaccgcg 60
 ccgctccggt ttaattttctc ctcgaccggc cagcgcaatt ctgtggctcg atcgatcggt 120
 cggtcgtaag gcaagtgage aagctatata tatatatagg agattcttcg agcgagctag 180
 tagcgagatg gggtccgcgcg tctcttttta ctgcatctgc atcgccgctg tcgtcgcatt 240
 gtcgtcgctc atggtcgcgcg tcggggcgccg cgccccgggg gaaaccccca agttcatctc 300
 ggcgagcgcc cttgagtgtc cgcctaactg aacggaaata gcaaaggcgc gcaagctgat 360
 cgatgtccat ggccaacgggc tgtgcccggg gcggttcgac cacacgcg 408

<210> 2387
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-B11

<400> 2387

acaacactct agattcagtc atattatatg cgatgtttac atccctcaca attttggcaa 60
 gtgccataat gttcaaggac tggctctgggc agagtataag cagtattgcc tctgagattt 120
 gtggggtttct tactgtgctt actggtactg ttgtactgca ttctacaaga gaacatgatc 180
 caacccttac ttcagatctg tatgctctc tttccccaat atattggcat atccaaggta 240
 acggtgaaac aggaggaaag ctgaaagagg atgatttact ctctggcaat ttcactcactg 300
 tgggtcgaca agactacttt gtctagagac cttccacgat gctcaatgtt ctggattaaa 360
 agaaaagaga acaacactac ggaaggatcc tactgat 397

<210> 2388
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-H6

<400> 2388

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gcctctcctg gcgtcgatgc tgctcgtctg gctcgccgtg ggctccgaag agggggagga 120
ctgcggcggc aaatagaaac cccaagtcag gactgcaag tttaaggcgg agccgtggat 180
ggacgggcac gctacgtact acggcgggcg cgacgggtta actgacacca cggactgcgg 240
cacgtgcggc tacaagggcg agctggggaa agactacggc accctgacag cggccgtggg 300
cccgtcgtg tacaccaacg gcaccgggtg ccgcgcgtgc tatgagctca agggccccaa 360
cggcaccgtt gttgtgacgg ccaccaa 387

<210> 2389

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-F2

<400> 2389

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aatgtcgcag tgaaggcggc ggccgtggcc gcgtcgtgc tggtcgcagc ggtgtcgcct 120
gccgcgcgcg cggcggcggt ggccgtggca ggaggggcgc cgtcgggtgcc ggccgggtccg 180
ctggacatcg cgcagctggg cgccaagggc gacggcaagt cggacagcac cccgatgac 240
ctcaaggcgt ggaagaacgc gtgcgaggcg acgggggtac agaagatcgt catcccgccg 300
ggcaactacc tgacgggcgg gctggagctg aaggggccct gcaagtctc catcatcatc 360
cgtctcgacg gcaacctgct cggcaccggc gacctcagcg cgtaccagag gaactggatc 420
gag 423

<210> 2390

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-G1

<400> 2390

caggccggtc tgaattacgg gtcgagacac gcgtccagaa agaagtcgcc taattctttc 60
gatcgaatta ggcgccttct tcgtcccacg ctccgtcttt atttgtaatc tgaagcttac 120
aggaacatatt gagtggatca tgggggggatt ggtaggcctc ttgaaagtcc gggtagtgag 180
gggcatcaac cttgcctacc gcgacgcaag aggcagcgat ccgtatgtcg tcctacgact 240
tggcaagaag aaacttaaga cgagcgtgaa gaagagatct gtgaaccca tctggcacga 300
ggagctaact ctgaccgtca cagatcccag cctagctctg aagctggagg tgttcgacaa 360
ggacacggt 369

<210> 2391
<211> 222
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-G2

<400> 2391

ggggaattct gacatctata gatatcctga tgctgttat cgcccaaat attcctcctg 60
attccactac attctataag gtcattgact agtgctctgg gtgtgggtca gtatacaccc 120
caattcttga tgctcgtcac acaatgcatt atggaaaatt ttacatttt cctgttcttg 180
acatggatgg aaatcttgtg actgtttttg atgttcttca ca 222

<210> 2392
<211> 378
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-034-Q1-E1-G3

<400> 2392

gcgtccagtt catacggcat ggatcagaac gacggctcgt tcctcgccgt gcgacgcctc 60
tccggcggcg ccatccacca ccacgccac cactcttcgc cggctgaggt cgtgggcgtg 120
gccacggcgt cgatcgggaa ggggcttacg tcgtgcgtgt gcgcgcaggg gacggagagc 180
gacgggcgcc tctccttcga tttgagtcac attcaggaag agtgcttgca tangttgcag 240
aaccgatag aggtgcagta tgatggttca aatctagagc atcagaaagc actggtgggc 300

ctttggcatg cttcttttcc tggaactgaa cttctaggat tagtatcaga ccaatgggag 360
gagatgggat tgcaaggg 378

<210> 2393
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-G6

<400> 2393

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tgaccctgaa atcaaggatg aggtgggtcga cagctccctt gaattcctca tcgtggcgag 120
tgatggactc tgggatgttg tcactaatga ggaagctgtt gccatggtca agcctattca 180
ggacccccag gaagcagcaa acaagcttct cgaagaagcg tcccgaaggg gaagctctga 240
taacatcacc gttgtcatcg tccgcttcct atatggaact accggtgata aatcaggcgc 300
agacaaagag accaccaatg accaaaactc ctaattgcct cctgtaggga tccatcatgc 360
gtgtgttttc ttctggctgt tgtatctgat gctcaaagta gatgctccgt gtgtc 415

<210> 2394
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-H10

<400> 2394

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tttttttatt ttaaaatttt ttttggtttt tttattttat ttttttattt ttgttttttt 120
ttttgttttt tttttttttt tttttttttt tttttttttt tttttttttt gttttttttt 180
tttttttttt tttttttttt tttttttttt tttttttttt tctttgtttt tttttttttt 240
tttttttatt attttttttt ttttttttat tttttttgt cttttttttt tttttctgta 300
tttttttttt ttgttttttt tttttttttt tttttttttt ttgtttattt tttctttttt 360
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt ttt 413

<210> 2395

<211> 107
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-034-Q1-E1-E8

 <400> 2395

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 gantcccaga agcatgacgg gctgctgcac accacctgcc gcacccc 107

<210> 2396
 <211> 173
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-E9

 <400> 2396

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 attccacaca ctttttgtcc gggttggcgt tgttccctct ttctcaaaaa tttagcgaat 120
 tgattcattc cgcttatgtt cttcccctga cagatggatt aacacttgta tca 173

<210> 2397
 <211> 307
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-C9

 <400> 2397

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 aaagctctct tcatectcat catcatctcg aattccgtct cttgtccctg tcgtgggcgg 120
 ggggtttcca cggtttttga aaggggaaag aggatgcgga ggagagggat ggggagggac 180
 gagaggttcc cgggtgtggga ggccgcgctc ggcgctgag tcgccgccgc cttcgccgct 240
 ggactcgtct gtgtctagct ttccatgccg gactcacact acagattcct caagtttcca 300
 cgtaatc 307

<210> 2398
 <211> 264

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-D12

 <400> 2398

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 gaaacgaaac ccccttggcg acccacacat caccaaggaa ggaacgaagg ggggaggagc 120
 agacgatcac ataattaagc aaccgcaggc aataaataaa taaataaaac aacgattaat 180
 taattattaa tcgggtgaac caaacacgat gtcctatccc aggtttccag cactccgcgc 240
 ggtacgtcgc tcagtcgagg aagg 264

<210> 2399
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-B9

 <400> 2399

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 gcgggagggg cgccgtcggg gccggcgggg ccgctggaca tcgcgcagct gggcgccaag 180
 ggcgacggca agtcggacag caccctgatg atcctcaagg cgtggaagaa cgcggtgcgag 240
 gcgacggggg tacagaagat cgctatcccg ccgggcaact acctgacggg cgggctggag 300
 ctgaagggcc cctgcaagtc ctccatcatc atccgtctcg acggcaacct gctcggcacc 360
 ggcgacctca gcgcgtacca aaggaaactgg atcgagatcg agaacg 406

<210> 2400
 <211> 276
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-A3

 <400> 2400

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 gtcgatatac tccgttctga tggacacatg gacatcgag cctctgcggg tcagccggac 120

atgctgtatg ctctgggagaa cactggcatg acgtattcga ctggacactt tccacacggc 180
atcaacgata tctacagtct ggtacagtcc acgatgactg ccaagcctaa cggaagcagt 240
gttaagcaca gcaacatatc atccatcagt atgcgc 276

<210> 2401
<211> 340
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-034-Q1-E1-B1
<400> 2401

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ccgaccgcca catctattag gtgcagccat ggggtgcctgt gcaacgaagc ctaagacgct 120
tgaggggaaa gccccagctg aggccaccat ctccacaccc aagggtgcac ctgagaccac 180
taccatccac attgaggttg cggcaaaaaca tgcagtagtt gagaaggtgg aggaggacaa 240
ggaggaggca ctaacagtgg cggcgaaaca agagccagca gccaccattg agcctcagca 300
gattgctagt gaggtgacca cttcggaagt ggcggtcgtc 340

<210> 2402
<211> 270
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-034-Q1-E1-B4
<400> 2402

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eggtcctctt ctacatcttc tccgtcgtg cctcggggc gggcaaggca ccggcagagt 120
caccgaaggc aggtagtctt gccattgcac cggccgattc accgagtga tgactcctg 180
cagtccttc caatgcaccc gagtctgctg ccactagaac tgcccccgct caggcatctc 240
gagccgcctc caaccccggc gcttcgctg 270

<210> 2403
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B7

<400> 2403

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aataaagatt ttgggtactc caacaagaga ggagatcagg tgcataaatc caagtgggtc 120
cgaattcaag ttccctcaga taaaagccca tccatggcac aagctttttg gtaagcgcat 180
gccacccgag gctgtcgatc tcgtgtcaag gctgctccag tactcaccga acctgcgctg 240
cactgctgtc gacgcctgtg cccatccgtt cttecatgag ctgcgggacc ccaaggcttg 300
cctgccgaac ggacggccaa tgccaccgtt gttcgacttc acagcagccg aactcgaaag 360
gctccccgcc gagcttggtc accggatcgt tcctgaacac atgaggaagg a 411

<210> 2404

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H12

<400> 2404

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gggcatggac atgccgatca tgcacgacag cgaccggtac gagctcgtgc gcgacatcgg 120
ctccggcaac ttccggcgtt cccgcctcat gcgcgaccgc cgcaccaccg aactcgtcgc 180
cgtcaagtac atcgagcgtg gcgagaagat agatgagaat gtccagcgcg aaataattaa 240
ccatagatca ttgaaacacc ctaacattat taggtttaaa gaggttattt taacaccgac 300
ccatcttgct attgtcatgg aatatgcctc tggcgggtgag ctttttgaga gaatatgtaa 360
gaacgtgcga t 371

<210> 2405

<211> 217

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H3

<400> 2405

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ccgtgttcgg cgccgcgccc gtggaggtct ccgtgaaggt ggccggcatc cactggcact 120
accgcagccg gtcccacgcc ccggagctca acgcgggcta ctacaacacg cggcgccacg 180
acgggtacct caccatcgcg cgcctcctgg cgcccca 217

<210> 2406
<211> 163
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-H4
<400> 2406

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ttcctgttca accaaaccca aaaaccctta agggaaaacc ccaacttaag gcaacaactt 120
caaaacaaaa ggttcaactt aaaacaataa caacaaaaat taa 163

<210> 2407
<211> 337
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-H8
<400> 2407

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agctgcggtc ctctttetaca tcttcgccgt cgctgccttc agcgcggccg aggcaccggc 120
agagtcaccg aaggcaggca gtcttgccaa ggcaccggcc gagtcaccga aggcaggcag 180
tcttcagct cctgccaaagg caccgagtc tgctgccacg agaactgccc ccgctaaggc 240
acctcaagcc gcctccaccc ccgccgtgc cgctgcccc tgcctcgtcgt cgtctaagaa 300
gtctgggtcca gctgcgcgc cgaccaccgc cgcctct 337

<210> 2408
<211> 429
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-034-Q1-E1-A11

<400> 2408

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 ctgtcattgc tcaggagctg cctcgacggg ggcaagaact ggcatctcgt gcagcagatc 180
 cccgaggtgc gcatcataag ctgcgatggc aagagatact ttcggtataa caagagccgc 240
 cgcatctacg aaactaatgc acagtcagaa gaatgaagcc atttctgaaa accttggcac 300
 gacactgggt tgttttgggt cagccacacg tttcagttgt cgctgtccct actttgttcc 360
 gggagtattg agagcttgtg ttctgttcac gattgattca ngtgttttcc tttggtttgc 420
 ctggttttt 429

<210> 2409

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F12

<400> 2409

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 atctcctcga acgccagggt ccttggacca ctatatccag gagcgacgaa gtgatccacc 120
 cgccagccat ggagatgaag aaggctctct gcgccgccct cgtcgccgcc gcctcggcca 180
 ccgccgtgct ggctcgggtc gcctccgagg cgccctccga ggcgcccgcc ggcgcggccg 240
 gtagtgcagc tggctcctagc gtaagctgcg ccgcgggtgc cgccgtgtcc accgccgggg 300
 cactcgtcac ctctttcttc gctactaac tccagtgatc gacgacgcgc gggg 354

<210> 2410

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G4

<400> 2410

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caaggttcat aaattgcgtc acggtcgggg acggcgcctt cggcaagacc tgcattgtca 180
 tctcctacac ctccaacacc ttccccaccg actatgttcc gacagtgttt gataacttca 240
 gtgccaacgt tgtggttgat ggtaatactg tcaacctcgg cctctgggac actgcaggtc 300
 aagaggatta caacagactg agaccactga gctatcgtgg agctgatgtt tttcttctgg 360
 ctttctcact gatcagtaag gccagctatg agaatgtttc gaagaagtgg ataccttaac 420
 tga 423

<210> 2411
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D9

<400> 2411
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 ggcgccatcg tgttctcttt caccgtcgcc gagtggctgg agacgctggc gtgcagcaag 120
 gccagcgccg ggatgctgtc cctcatgtcc acggtgccca agactgtcgt gctggccgag 180
 acggggcagg tcgtcggcat gggcgacgtc gcggtcggca ccgtcgtcgc ggtcagggcc 240
 ggcgacgtgg tccccgtgga cggcgtggtc gtcggcgggc acagcgaggt cgacgagagc 300
 agcctcacgg gcgagtcctt ccccgtgccg aagcagccgc agtcggaggt ctgggccggc 360
 accatcaact tagacggcta catctccg 388

<210> 2412
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E10

<400> 2412
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 cgtgccccga cgccgagaag atcatcttgg gcgtcgtcga gaagcggttc aaggcggacc 180
 ccggcacccg cgccggcctc ctccgcctcg tcttccacga ctgcttcgca aacggctgcg 240

acgcgtccat cttgatcgag cccatgtcga accaggcctc cgagaaggag gcgggcccc 300
 acatctccgt caagggctac gacgtgatcg aggagattaa gacggagctg gagaaagagt 360
 gccccaacgt ggtgtcgtgc gcggacatc 389

<210> 2413
 <211> 293
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-033-Q1-E1-E2

<400> 2413

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 atgggttctt tgggtgaccat tgtgacacaa aagagtgggg cttcggtttc agtactggtt 120
 gggagaggca tgatTTTTTg tcaacgaaca atgtcataga agaggtgttc gggaagggtc 180
 ccagtgaaga tggaagtgc actgctactg gccaggacct tatctgagcc agaggcggag 240
 gcttcttttc agctgcgaaa ccttttagcag ctcccccttg ttctctgaat ctg 293

<210> 2414
 <211> 356
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-033-Q1-E1-E3

<400> 2414

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 agaaatgaca tccggcctgt gcttcaggtc aaaagtagtg cacacgcaat gatgggattt 120
 gctaatagatg ctttcgtatg atgcgcgcgc ggaaacaagc atgtgaangg tttcatgttt 180
 gaaaaaccgg ttgatctgaa agtangtgtg aaccatgtcg tattgctgtc gtcaactatg 240
 ggaatgaagg atagtgggtg tgaacttgct gaagtaaacg gcggcattca ggagtgccta 300
 atccaaggtc tcaacactgg gacgttggat ttacaagtca atggctgggg ccataa 356

<210> 2415
 <211> 422
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E4

<400> 2415

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atggctgggtg atggcatgga ggtatctgcc agcgggggtg gcggcggcaa caagcagccg 120

cagatcagcc ttttgggggt gttcctcgcc tgcattggtcg ccggcggcgt gcagtacgga 180

tgggcgctgc agctctccct tctaccccc tacgtccaga cactggggat tctcatgct 240

cttacatcag tcatgtgggt ctgtggacct attgctgggt tacttgtaca accctgcgtc 300

ggcctctata gtgacaaatg cacttctaag cttgggagac tgaggccatt catctttaca 360

ggatgcatca tcatctgtat atccgtgata gtcacgggtt tctctcaga catcggttac 420

gc 422

<210> 2416

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D4

<400> 2416

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aataatgctc aacaaaaagg ttccaagggt cccaagaaac caattcctcc tttccaatcc 120

ttaaaaaacac ttttaagaaaa attgcaaatt gaaacaacac ttgaagctga catggagaag 180

aaaaatggga caacaatcca catgaagctt gtaaaaaaga aattaaacta ataatttatt 240

ctagtgtcaa agttcataat gactggactt gtactctgtt attatgctat aataatttgt 300

tgaatattag atgatcatgt catgtgctgt tttttttaca tttttagtga tgtttcattg 360

tgtttttggt tttctaaata tttcctatct ttctttgatt tttatgattt tttgaag 417

<210> 2417

<211> 132

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C10

<400> 2417

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gactaataag cgactcctcc tcatctcgct ggcgtctgcg ggcattcgga cggcgcaggc 120
ctatgcgatc gc 132

<210> 2418

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C11

<400> 2418

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ggtcgttcgt ggacaataat ggcgcctctc ctggcgctga tgctgctcgt cgggctcgcc 120
gtgggctccg aggaggagga ggacggcggc ggcaaaaaga agccccacgt caaccacggc 180
aagtttaagg cggagccgtg gacggacggg cacgcgacgt actacggcgg gcgcgacggg 240
ttaactgaca ccacggacgg cggcgcgtgc ggctacaagg gcgagctggg gaaagactac 300
ggcaccctga cggcggccgt gggcccgtcg ctgtacacca acggcaccgg gtgcggcgcg 360
tgctatgagc tcaaggggccc caagggcacc gtggtggtga cggccaccaa cg 412

<210> 2419

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C12

<400> 2419

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agtaccgcg cgtgacgggt cggagctga cgcagcagat gtgggatgcc aagaacatga 120
tgtgcgcggc ggacccgcg caccggcggt acctgacagc gtccgccatg ttccggggca 180
agatgagcac caaggagggt gacgagcaga tgatcaacgt gcagaacaag aactcctcct 240
acttcgtgga gtggatcccc aacaacgtca agtccagcgt gtgcgacatc ccgcccgtcg 300
ggctgcccac ggccctccacc ttcgtgggca actccacctc catccaggag atgttccgcc 360

gcgtgagcga gcagttcacg gccattgttc cggcgcaatg ctttcttgca ctgatacacc 420
ag 422

<210> 2420
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C3

<400> 2420

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aacaaaaggg ttgccgttgg gaatttcctt attcaactgg ggccaacaa taacaacaaa 120
cccgaaggtc cggttaccaa aggaaaacgg gcggccgggg tctggaaaac acgacgaggg 180
gcgcgctact cgcagcaccg cgtgcgcagg ttctggctct ccagacgcc cgactacatt 240
caggccatgg acaagggtgcc cacggaccct aataagtaga cgacgaccat atacccaat 300
gcatggcaag aagatatata tatcagcaca acgcaactgc atgcgatgct gcatgttgct 360
gcaattaatc cactatacta tatactataa gagtattatt a 401

<210> 2421
<211> 250
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A3

<400> 2421

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caatcccctg gaagaatccg ccgcccggga agttccaaaa aaaggattct ccggcaacgg 180
gttcaacctg gtccgggtca aaaacaacca aatccgcaaa ttcaacgtta aaggcaagtt 240
cccccgaaaa 250

<210> 2422
<211> 214
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A4

<400> 2422

ttttacctga agttaaacca tgggaacatg aaactgacat gggcaaactc caagaaactg 60
ttaagaatgt ccaaattgaa aggctgctcc ggggcgcaac caaacctggc ccaatttggt 120
aagggaacca gaaactggaa atccagaaga acaacctcca acaacctggc cccggccaaa 180
atcccaatta agaataaccg ttcgctaac caat 214

<210> 2423

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A9

<400> 2423

aaccaagcct tcgggccttc caaaagggtta accccggggt taatgttcaa gggaggcaac 60
ttcacaaccg gaaacggaac ggggggag tcaatctaca gcaggcacat cttctccgac 120
gagaacttca agcacacca cgctaaagcc ggtacgctgt ccatggctaa ctacgggccc 180
gactccaatg gctcccagtt cttcatcacc accgtagacg aaaaccggtt gcccaagaag 240
ctggacgggc gccacgtggt gttcggcaag gtggtgaaag ggatggacgt cgtgcgcaag 300
atcgaagccg agggccagct caccggcgtg cccaaggcca aggtcgtcat agccaacagc 360
ggccagctgc caacgcccgc cgccgcccgc catcggttacc tctga 405

<210> 2424

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-B1

<400> 2424

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acaaaataaa aaggagagag agagagatgg ctctgtcgtc tcgccgtatg gccgccgcac 120
cattcttcgt cgtcgtcctt ctcgtcctcg tggcggcaga gaggacgatg ggcagggtgg 180
tggtggaaga gacgctctgc ttgtcgcaga gccatgcctt caaaggcgtg tgccctagca 240

acaccaactg cgacaacgta tgcaagacgg agaagttcac aggcggcgag tgcaagatgg 300
acggcgatcat gcgcaagtgc tactgcaaga aggtctgcta gggcatgacc ggcagcaagc 360
cccagccgta cggctggttg atccggttgc acaccgtttg ggcacgcggg catgttccgg 420
cttctcggct tt 432

<210> 2425

<211> 200

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-B4

<400> 2425

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agggggaagg gaaaacacct tcattcaacc cgccggaata attggctccg tttccgggtcc 120
cggcaacaac aacggcgggc ttcacccaag cccaatcctt cttctcccct gttgccccgg 180
ttaacaaccc aaacttcccc 200

<210> 2426

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-B9

<400> 2426

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tccgctcgcc gttgtgtcca ttcggggcaa acacacagac ctccggagcc tgccgcagct 120
ccagcgatcg gaccggaaaa atggtgggag aacagagaaa ttccaccgcc atggtccggc 180
gccgcgcctc ctctggtgca ctggtaccgc tgccatgtgc cattcagtgc gttggtggga 240
tctgtcatc gtggtgggaa tccaacggcc ctgggtaatt cgggtgtgct cccacatttg 300
gcctcgggtga tcagctacag gattccgctc acatccccag tgcaaatcat gtgctcatc 360
cgggtggatt gattccccgg ggaccc 386

<210> 2427

<211> 354

<212> DNA

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 gcgggtcatg cgggcccccg aagggtgccg cgggtcacia catcaccacc aactacaacg 180
 gcaagtggct caccgccagg gccacctggt acggtcagcc caacgggtgcc ggcgctcctg 240
 acaacggcgg tgcgtgcggg atcaagaacg tgaacctgcc accctacagc ggcattgacg 300
 cgtgcggcaa cgtccccatc ttcaaggacg gcaagggctg cggctcatgc tacgaggtga 360
 gatgcaagga aaaacctgag tgctcgggca atccagtcac ggtgtacatc actgacatga 420
 actacgagcc tatcgctccc t 441

<210> 2430
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-032-Q1-E1-F5
 <400> 2430

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 acgcgtagcg cgggaaatgc cggcgggcggc ggccattgacg acgaggcggg tgggtgctgga 180
 ggtgctacgg tcggcctccc ggcacgcctt ccagggtggc ttctccttcg cggcgaggcc 240
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 tcgtactac 430

<210> 2431
 <211> 339
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-032-Q1-E1-G2
 <400> 2431

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tgacgatagc tgctggaagg acgacgacca ccaccctatc tgctttcccg aatactgcgt 120
ggcgacctgc catgatcacg ggcacgcgga cggccgctgc aactgggcat ggtcgtggaa 180
gccgtattgc cagtgcctgt tggcggactg ccaatacgcg cgaacagctg cgtcgcacatgg 240
cgtcctggct gcctcgccgg ccgatgaagg atgaacgggt gcggccgatg atcgatgtgt 300
ccgtcggcat gtcgatcact cattggaacc ccctctaata 339

<210> 2432
<211> 382
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-032-Q1-E1-G3

<400> 2432
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aacctgctcg gcaccggcga cctcagcgcg taccaaagga actggatcga gatcgagaac 180
gtcgagaacc tgtccatcaa cggccacngc accatcgacg ggcagggacc cctgggtgtg 240
agcaggaaac agtgccagca ttcttacaat tgcaagatcc tcccgaatag cttgggtgctg 300
gatttttgtg acgaacgtcc agattcgcg catcacgctg ctcaacagca agttcttcca 360
gctcaacatc ttcgagtgc ag 382

<210> 2433
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G4

<400> 2433
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atggagatga agaagatcgc ctgcgccgtc ctgctcgccg cctcggcggc caccgtggcg 180
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gtcggcgccg ccctcggggc cgccgtcgcc tccttcttcg cctactacat tcagttagcc 300
ggccggggcg cccggaggcc gaggaagaga cgaaggggag agagagtgc atggctgcgc 360
gcattccgat gcgtgggc 378

<210> 2434
<211> 375
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-032-Q1-E1-E12
<400> 2434

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gcgctcgcca acgacccccg gacgcagccg ctggcgcgcg gcccgctgca cgactgcgtc 180
gagtcgttcg acgacatcgc ctacagcctc gaccaggccg ccaagtcctt cgccgccggc 240
aaccgcgaca ccaccggcac catgctcgac accgtgcgca ccgacatgga cacctgccac 300
cagggttcg agggagcgga ggagctcacg ccggtcatgg ccaagcacga ctccgaactc 360
cccaagctct ccagc 375

<210> 2435
<211> 325
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-032-Q1-E1-E2
<400> 2435

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ttggccgcgg atcgggtgcag tgcattgcga gcggaagagg tggcgcgacc tgggtgcgtg 120
agattgaaga tgagcgggga ctccagcgcg ggatcgagta acacgatgaa gaatctccat 180
ccactgggtga ttaccgttgt caccgtgct cgccgcgacc caaggccagt gcctcggcgg 240
gaccctcgcg ctatcggcgt ccggtcnccc ccatgccgcg tgaggacacg tgttacctga 300
agagcaagtt ggtacctgga atctc 325

<210> 2436
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-E5

 <400> 2436

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 aagagtacta tctcagctac tggattggga aggatagctt ggtggacgat caagtgtcgg 120
 catctcaaat aatcaatata atgtggaatt cattgaaagg acggccagtt ctggggccgta 180
 tataccaagg gaaggagcca ccacaatttg ttgctctttt ccagcccatg gttatcttga 240
 aggggtggaat cggatctgga tacaagaagc tcatagaaga aaaaagtgct aggggtgaga 300
 cttatactac tgaacgcata gctctaattc gagtatctga gacatctatc tacaacaaca 360
 agactcttca agtagaatcg gtagcaacgt ctttaagctc agcggagtct ttcgtactgc 420
 aatctggaa 429

<210> 2437
 <211> 310
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-F1

 <400> 2437

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 gcccgccggg gctcctgggc cgacattgaa ggccgccgtg cgcgcgctct tcgacctccc 120
 cgacgacgcc aagcgccgca acgccgacgt catccccggc agcggctacg tcgcgccttg 180
 cccgccaacc cgctctacga ggccttctgg ctctctgacg ccgcccgcgc cgccgacgtc 240
 gacgccttct gcgcgcgct cgacgcgcgc cccatagtca aggagaccgt taagacctac 300
 gcggagaaga 310

<210> 2438
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-C3

<400> 2438

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cacacggtgt cgatggcggc cgtaataagg agccgcccgc gcgtgtccgt tttcttctac 180
gtcgtcctcg ccgcagctgc agctgcagcc gcggcgagg catccaataa cgtcacctcc 240
gacgatgagt actgggaggga gcgcgcccag gtggctcggg cgcgcaacct cgccgcctac 300
gtcagcgaca ccgtggccgc cacgaaccgc ttcaacgcag acgtgctgag ggccacgacg 360
cggcggggcg tggcgaagta cgatgggccc tgcattggca ctcaacca 409

<210> 2439

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D2

<400> 2439

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gataaactat atccaattaa agacatgacc caaatatctt atgttgaaca aagagtttac 180
tttaccaaga acatgataga gtaaataatga gtttgcaatc taaactgtta gtgtttacgt 240
gtatttggtg ttatgcaata ttataattg aaatgtatgt gtttattccg ataaacatga 300
cgaacgcact gatattcttg cgtgattaat gtacgaaata tggagataca agtgctcgat 360
tcacttagta cctaaatcga tcgcagaaac atcactcact c 401

<210> 2440

<211> 435

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-032-Q1-E1-B1

<400> 2440

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ctgtctgtcgc tgctgggtcgc cgtgctagcgc gtggccgccc atgtcgccaa cgccggccac 120
gccaagcccc tgacgcctgg cgggcgtgtg gtacacgaca accacggcaa gttcacggcc 180
gggccgtgga aacccgcccc cgcgaccttc tacggcgggc gggacgggtc cggcaccacg 240
gcgggcgcgt gcgggtacaa ggacacgcgc acgcangggc acggcgtgca gacgggtggcc 300
gtgagcacgg tgctgttcgg tgacggcacg gcctgcggcg ggtgctacga ggtgcgggtgc 360
gtggacagcc ctagcgggtg caagcccgac gcggcggcac tgggtgtgac ggtgaccgac 420
ctgtgcccgc ccaag 435

<210> 2441
<211> 189
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B3

<400> 2441

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tattggagca gtgataacaa taacagcaac aatgcctgga gtaacaacag caattttaac 120
aacaataatg actggagtgg taacaattcc tataacagca gtactgagaa cggtaatagc 180
agctacaac 189

<210> 2442
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-A3

<400> 2442

cggtcaggga ttacagggtc catccactcc tgacctacca agtacatggt catccaaggc 60
gagcctggtg ccgtcatccg tggcaagaag ggatcaggag gcatcaccgt gaagaagaca 120
gggcaggcac tcgtggttgg catctacgac gagccgatga cgcctgggca gtgcaacatg 180
gtggtggaaa ggctgggcga ctacctgctt gaacagggca tgtaactact acgtaccagc 240
tggaatgcat gtcgacgacg atggtttcga gtttcgactt ccaataatag taacaacaaa 300
gcaaaggcct tcctcccggc gtatttgctt tggctcttct cctccacgcc ataagatatc 360

tagcaattgg tgactcgcct taattagttc gctttgcttt tgagggtgac tcgaccattt 420
tgctgtagcg tgaattgcat ggacatg 447

<210> 2443
<211> 259
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B9

<400> 2443

actcgcgggc cgatgcaagc ctctacagtg actcgtattg actgcgacgc gtccatcctg 60
atcgacccga tgtcgaacca ggccctccgag aaggacgccg gcccacacgt ctccgtgaag 120
ggctacgacg tggtcgagga gatgaagacg gagctgggga ggaggtgccc gcgcatagag 180
tcgtgcgcgg acatcatcgc ggtgagcggc gtcgtacgct gtgaggcaca cgggccgtcg 240
cgagtaggct ttgtccctg 259

<210> 2444
<211> 241
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-C1

<400> 2444

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tcgggagatg ccctgcacgc acacgttcca ctccaattgc atcgttccgt ggctcgagat 120
gcacagctcc tgccctgtct gccggttcca gctgccggcc accgactaca aaggctcatg 180
cagcagcggg gacgggtggtt ttgtcagtgt cgatgcggat ggtgaaggca atgacaacgg 240
c 241

<210> 2445
<211> 322
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-F11

<400> 2445

ctgcatcgac tttaacg

317

<210> 2448

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-G9

<400> 2448

cgcacgcgtc tataatctata cacatatata gacctaataa gaacaaagac gtacgataac 60

ctgcttattt tgcgacccat cccgttccca cgcaaaggcg ccgagcgtga tctccgtcgg 120

tgccgggatg gcctcgcacc gggaactgct gctgctgctc ctccgccg ccgtcgtcgc 180

tgcgctggcc tctgtcgcac ccgccgacga cgccaacgcc atgcccacca tcttgacccc 240

cgtggcgcat accccgctgg ggctcttcga cggcgacaag ccggcctctg acgatgacgc 300

cgtcgacgac gacgaggacg ccgcccctgt cggcgcgccc aacggggcca ccatgactga 360

<210> 2449

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-H11

<400> 2449

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ccctcaccaa ataagggtccc gcccttttcc gacattcaca ggggggacag gaaatcagcg 120

gccatggcct cgattcgggc gacgaccttc gccgtcatct tatccgtcct cttctgtgcc 180

gcggctggca ccgccgtcga caacgacctc cccgactacg tcatccaggg ccgctgtctat 240

tgcgacacct gccgcgccg gttcgtgacc aatgtcaccg agtacatcgc gggcgccaag 300

gtgaggctgg agtgcaagca cttcggcacc ggcaagctcg agcgtccat cgacgggggtg 360

accgacggga acggcacgta cagatcgag ctca 394

<210> 2450

<211> 366

<212> DNA

<213> Zea mays

atgcgactgt ggtacagaag atcgtcatcc cgccgggcaa ctacctgacg ggcgggctgg 120
agctgaaggg cccctgcaag tcctccatca tcatccgtct cgactgcaac ctgctcggca 180
ccggcgacct cagcgcgtac cataggaact ggatcgagat cgagaacgtc gagaacctgt 240
ccatcaacgg ccacggcacc atctaccggc agggagccct ggtgtggagc aagaaccagt 300
gccagcattc ttacaattgc aagatcctcg cgaatagctt ggtgctgga 349

<210> 2453
<211> 291
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-D5

<400> 2453

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aatttctggc ttgggttaaaa aaatccacta gactgtagga gagggataaa gggttacgtc 120
atgatagaaa acctcaggat gagcaattga acagtgagag gtgaaggcca gatagtgatg 180
gggggaaagg gttcggggat tttatcagcc gggaccatgt ttcggtctat tcttaataata 240
atacaggggag ggaggtatatt agataaaagg atgagtttct gtttgataaa a 291

<210> 2454
<211> 315
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-E10

<400> 2454

aacatgcagt catctcctcc atcaccacca ccaagctcaa caacagccag ctcgcgaaaa 60
taatgaagag ccgcagcatg gcatcatcgg ccgcgtcttt ggtgcgagcc ggcgcgctag 120
tggcggccac agccccacag gtagcggagg caaagaagaa gagagcggcg gagagcggcg 180
aggcggcgga ggcgaagaag atccaggacg acttctgctc gacgctgtgc gagggcaaga 240
aggggacgga cctggtcgtg tgcaaggagt cctgcgcgct ctcccagcag tccaacctgg 300
tgctgtaagg cagga 315

<210> 2455

<211> 65
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-B10

 <400> 2455

 gcgggctgga accctttgcc tctgcttta cctctatcct cttccgtctc tactgcactc 60
 tgctc 65

<210> 2456
 <211> 311
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-B3

 <400> 2456

 caacaaaaag gcagttcttc cgcgactgcg aggtgctggg caccgtggac ttcattcttcg 60
 gcaactcggc ggcgctgttc cagaactgcc tcatgacggg gcgcaagcgc ggggacagcc 120
 agtccaacat ggtgacggcg caagggcgga cggaccccaa catgcccacg ggcacgtgc 180
 tccagggtcg ccgcatcggt cgggagcagg cgctcttccc cgaccgcctc cagatcgcca 240
 cctacctcgg ccggccgtgg aaggagtacg cgaggacggg ggtgatggag agcaccatcg 300
 gcgacctcat c 311

<210> 2457
 <211> 327
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-B9

 <400> 2457

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 catctgcggg tcccacatca tcgttcgaca cagcagcacc gagcattcaa tccgtcatcg 120
 ggggcgatga cggcgacagt gattatacat gcagcggctc tcgcagtcct ccagctggcg 180
 tcatcgtcgt ctaaaacggc acgcatggcc agcgtcgccc aggacgaact ctcagcattc 240
 gtagcagtgg ccgttacttc ttcacatcac ctgcataaag attgatccga agctgcagat 300

gaacggaatg ggactgataa ggagtgc

327

<210> 2458

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-C10

<400> 2458

gggtcgacgc ccgcgtccag ccgcattcct ggtgtcgggtg gtgttcctgg gcctgtccac 60

ggtggtgacc atgatcttcg cccgcgaggt gccgctggac ccggcggcgg cggcgaagca 120

ggacgaggcc ggggagtcgt cgggcccgtt cgccgttttc aagggcataa agaacaatgcc 180

ccccggcatg ccgcaggtgc tcatcgtcac gggcctcacc tggctctcct ggttccccctt 240

catcctcttc gacaccgact ggatgggccc cgagatgtac cacggcaggc ccgacggcag 300

ccccgaggag gtggccaggt tccaggaggg cgtccggcag ggccgccttcg gcctgctcct 360

caactccgtc gtcctcggag ccagctcctt cct 393

<210> 2459

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-A12

<400> 2459

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atgaccctgt ccagcagcag tagcagcagc cggcgtgtga cgctgggtact gtcgggtctc 120

cgcctgcggc gtctgggttg tgttgccgag gcggtagtgg agttgggtgcc tgctgatgat 180

aatatcgccc ccgcgcgtgc tggcacggcg gtggacgatg gcgagccgcc tcagcagtgc 240

gcgaccccg tgagcgtgga ggaggcgtgc cgcggcgcgt ccgagacgca cgcgggcgtg 300

gcctacgacc actgcatggc gtcgctgggc gccgaccgc gcagcaagga ggccgggaac 360

aagaaca 367

<210> 2460

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-H10

<400> 2460

gacgcgtggg caaccgtgtg ccttttggag acgcgatgtc gtccggcaac aagatcagcg 60

tggccttgct gagcgtggcc ctagtggggc tgctcctctg ccacctcgcc accaccgctt 120

ccgcccacca gaaagacatc cacgtcctcg gcagcgtcga eggctccagc gacggcagca 180

gccccgagtc cgaaggccgc gtcgtctacg cggacatgaa gctggctgat acggaatccg 240

atgcgccggc gccggcgccg ggcgccggggc cgctcgtccg ttgaactgag aagcgtgcgt 300

ccagccaagc aaggtgggtca aaaccgagaa ctaattaagg gctcgattgt gtgtccggct 360

actactgttc ttgccataat tatatataga tacgcaaagt gtggccaagc ctaccacatg 420

ca 422

<210> 2461

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-H12

<400> 2461

atacactcca ctagagtcag tcagattagc tgtgtgctgc tgcttcccct gcgtcatggt 60

ggaggtcgcg gtgctcgcca cgggtgcgcgc gcccgcgggc ctgtgccgca aggccgcacg 120

cgtgcgcaag ggccgcagge gctctgcctc cgcggggccag gccacggaga tatacgagct 180

cctcgtggac gacaccggcg tcgtcgaggt ggatgccggc gccgccaatg cagtggcgct 240

gcccgtgaag cccgccttgc agctggagga aaagggggag ctggacaagg acgtgtgggc 300

gacgttctac ggcaccggct tttggacgag cccgtcgag ctggacgaca acgacgacag 360

gtgatcggga caggcccgcg agcgagctat ccaaaagct 399

<210> 2462

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-H2

<400> 2462

acccaagcgt caatcctatt atgatgtcat ctctgatgtg tatagtggta attctgacgt 60
attatgatct cgctgactga aacttctaca ggccagttga tagcagggtg gattccttca 120
cgggacctcg taatcattcg tgctagttag taactcatgt aatatgctct caaaccaagt 180
gtatcctgca ggaatttttc agacacacat atctgcgaat gtgatctcaa tccagtggca 240
tataaatttc tatcatggaa cgagtactcg ttgcatcatt atgagcacat attgaatccg 300
gattatccct gcctctgacg agaatggatt tt 332

<210> 2463

<211> 334

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-030-Q1-E1-H8

<400> 2463

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gaagcaagcg tctccgatcc gatgcacgt gcgagcatat ccactgcgat ggacgcgaga 120
gcggccatga gctggtaactg cggctccctt ctggccgtgg ccategcgct gttcctgtcc 180
gtgtcnctcg gcgtgcacgc cgccggagcc ggcaccggcg ttgacatcaa tgtgtcgtgt 240
gcagcgacgc cggacccgga cgtgtgctcg cgcgcgctcc aagctgacag cgactccaag 300
accccgcggg acctgacgga cgcggcactc cgcg 334

<210> 2464

<211> 290

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-030-Q1-E1-G3

<400> 2464

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gggtccagga gaatccagca aagcataaaa caaaactggg aaccttaagg caggatagct 120
tgaccacacc gaagctgggtc caagcaacaa attccttgag cctgcaaagt catgaacttg 180

gtgagaacca ctgggagtca aattgggttag acaagtggat ggctgtacgt ccatgggaga 240
 acatgttact tgactgtaat gccanagaga gtctgccaac gcatgaagat 290

<210> 2465
 <211> 259
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-030-Q1-E1-D7
 <400> 2465

catcactcat ctcatgacat tcatacgaga cacacaaagg gcattctcgt gtattcgact 60
 tccgaagcaa gctttcataa gatgcgcgcg aggaaccatc caagtgatcg gtttgatata 120
 tgaaagacca gatgatgcaa aactatgtgt aaaggatctc atattgctgt catcaactat 180
 tcaaatgact gatagtcgac gtaaacttac taaaatatct ggctgcacac aggagtgcg 240
 aatccaaggt ctcaacaca 259

<210> 2466
 <211> 406
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-030-Q1-E1-D8
 <400> 2466

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 ttttcatctt cggtctgtat ctttgacaag atgaacaagg acaagcactc agaaaattca 120
 caaggagaaa gcacggacaa tatttttgcg agcggttggtg aagggaccgg acaaccaaag 180
 aatcaaaaacc ttcattgtgtc tcacagccga cgtagtatca tgagaatttc taatttttcc 240
 atgaaaagag gcccttcaat ggccatgata gtccttcag tagctatcag agtccttca 300
 atatctctga gaggtccttc aatgtcttca agagcatctt ctgtgtctgt aaaggaagac 360
 caaatttccc caaataaatc agacaggaa acggaatcag tgttgg 406

<210> 2467
 <211> 368
 <212> DNA
 <213> Zea mays

<210> 2470
 <211> 341
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-C11

<400> 2470

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 cggtccgggt ggtggccagc gaccaccgca aggccacctc atggcacgtt ctccccgctg 120
 actggaagtt cggcgtcacg taccaggcat ccaagaactt ctaagtagcc actttccctc 180
 ctcttcttca tcttgcataat gcccacaagc aaccatgcaa atgataacat gcatcatgca 240
 tgcataattca ttctttcgct catgcactcc aatatggtgc cggagttaaa aaaatgtaaa 300
 tcaatgtgca aactcaaagt acatcttaac cagttgtgat c 341

<210> 2471
 <211> 368
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-A7

<400> 2471

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 caacgatccg gccccggccc cgcgcggtca cagcaagccg ggacatggcg cgcgggcgga 120
 tcgcccgcct actcgccacg ctctctctct tctctctgt cgcacgccc ctgcgagacg 180
 gagcttccga ggcagaggcg gcgggcctcg cgcagggcgc gtccgaggcg gcggcgccgg 240
 acgcggggcg ggacgcgcag cagcagcagc tctgcccgc gcccctcgtc atcgagctcc 300
 cgtcgtcgct ggccgaggac gaggacgagc ccggcgccga cgccgtgccg ccggacgtgc 360
 gctgcgcc 368

<210> 2472
 <211> 391
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-030-Q1-E1-B1

<400> 2472

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tgcctcctcc tcctccttaa ggaaggggtg caaaacttca gcgaccgacg aagaagacgt 120
tccggtgcag cagcgggttca tctgggtcaag gaagagaaag atgccgcgcc tttttcacga 180
ctccatcatc tctcttctgg attactctca gtgctgcagc gtaaaactcg gcgcagttcc 240
ctgtaaaaagc tggagctttt ctgagcgtgt angtgcgttg gtggaacttg ggccccagc 300
ccccaccca agatctcacc tatctgcact gggctggccg gctgggcccg ccgccaacca 360
acgtgcttcc gccattgcgt cgccgcataa c 391

<210> 2473

<211> 297

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-H6

<400> 2473

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tctagtgcga ttcagtcata tgacgtgtag gaagctgcgg aaggtcctag cctgcacaga 120
tatagaccac gagcaagcaa ccaagtgtgt caccgaggct cttctgttca aagctgatgc 180
accacaccgg caacgagctc ttgcagcgga cgcaataacc tgccggaaat tcgccgagcg 240
ggcttacaag tacagaccac tcaaagttgt tgagtttgat cggccctacc cacagtg 297

<210> 2474

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-A3

<400> 2474

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cgctcctatt ctagcatttg tgacaacca cattctgtac ctcaacttct acgaacttga 120
caaaggcctg aacatgaagg tttgtactgt gataatcatt gctcagtgtc tcctatgggc 180

actgtgggct gtcattgactc ggcattccttc acggctgaag atcatatttg ttgccatcgg 240
 aggtgcggct gcagtacttc tggaagcttc tgacattcct ccgcgatggg gatattgtga 300
 tggccgtgct atatgccttg ctgtggctat ccccttttcg taccttttgt ggagctttgc 360

<210> 2475
 <211> 262
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-F3

<400> 2475

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 caaggcatta aaaaaaaaaag cggggtaaaa aggttgatcg atgggaaatg agaatgaaga 180
 acaaggcaag aagatacaaa caaagaccca ccaggaggtc agaccggca ttgacgactc 240
 aactacaagc ctaggagaaa aa 262

<210> 2476
 <211> 287
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-F7

<400> 2476

gtcgatacaa gcctctagat cgagtcgtat taatcgctc atcgaccacg cccctttcca 60
 ggctcccgtc tccatgggtc tcctctcaaa caggattggg agggagagcc tcaaggcggg 120
 ggatcatatc tactcctgga gggcggcggtg ggtctacgag catcacggaa tatatgtggg 180
 cgatgataag gtgatccatt tcacaagagg aagaggacag gaggtcggaa caggaactgt 240
 cgtcgatatt attcttgtga gttccacccc aaaacgaagc aacacgc 287

<210> 2477
 <211> 284
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G2

<400> 2477

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gggcactaca tggacgtcgt cacgggaggc gacatgtggc agttgctgaa ctattgcacg 120

ggggagatga atgaggcgct ggtcaatctt caccacagcc aaggcatgct gcagaagtgc 180

aacctctaca agttgagcct gttcttgac aggtggcagg aggagtctta gcccggcgac 240

atcggtcgga atctttcgac atggtcgccg gtcaggacga tgct 284

<210> 2478

<211> 256

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G6

<400> 2478

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gcaaggcggc gggcatcctg cggtgctga tggggatggc ggcggcggcg gcgcccgcct 120

cggcattgcc tcggggcggc ggcctgatga tggcgcagca cgtcatcctc gacgtcaacg 180

gggaactgtt ctggggcggg gtcggcgggc gcggcggtgc gccggcgctt aaggccgcga 240

tcgcccgcgt gaagga 256

<210> 2479

<211> 290

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-G8

<400> 2479

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tgccgtcgcg gtccctggccg cgcgcccggc gtctgcaggc gggggagccg cggcggtggc 120

ggagatctgc atgaagactc cgtccccga cctgtgcacc aggacggcgg ggaagcacgc 180

caacaagtac aagggtgtgg acgcggtgac ggtgctagag atgcaggtgg acgcgttcaa 240

gaagcgcgtg aaggcggcgc ggaggctcgc caacgatgag gtcaagacgg 290

<210> 2480

<211> 246
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-E8

 <400> 2480

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 atgcgctcgt ctgctgctcc gagatcgatg gagcttctga atcctaggta gtcacgctc 120
 gttcacctat cgggtcccgtg catgtacata gttggggaca cacgtcgcta ggacgatgag 180
 agagagagag agagcatggt aggggtgaaga ctggaagatg cttgtaaaact gtaatttgat 240
 cttggc 246

<210> 2481
 <211> 400
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-C11

 <400> 2481

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 cgatagacct cagccctcat gcaagccgac cgcttacgta ccaccgcgcc aacccgaaag 120
 taagatggag atgatcatga cgatcctcat cgccgcgctc ctcgttgctg ccgtctcggg 180
 caccgcagtg ctggcctcta acgacgcagc tgcagccggt gccgaatccg catccgcgctc 240
 gtccaattat gtggaatcct cccgctggag cccccggta cgtctacagc actggcaccg 300
 cctcgaggct gacagctaga ggtccagccc ttgccatagc cacggcattc atcgttacac 360
 gatgcatcat catctgtaaa tctgtgaaac tcatcggttt 400

<210> 2482
 <211> 293
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-C6

 <400> 2482

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ttctacggac gcaacatcgg ctacccggat aagctgaggg acatcggctt catcgtctag 120
 tcgatctgca agccgctcga cgcttggtt aaggacatgc gcgcggtcgc ttatttcac 180
 cgagtttggt tttttgcagg attcttaaaa gttggaccgt gctgctagta ttccatgttt 240
 cgtgttttca taatggacga cgtctgtaga tgtataaaaa tcctctggcg ctt 293

<210> 2483

<211> 329

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-D10

<400> 2483

cagctgaccc ctgcactgga cccttccgag agctactagg acccatcgaa cgtgaacgag 60
 gaagcagtcc ctttcacgca cacacaacag ggagcttgga ccggtcacc atagcaccat 120
 cggattcaga ggcaacactg tcataccacc agggcactca tcaatcaatg aaatctaaga 180
 caaacccatg aatcccagcc agtacaactt gatcgcttca aaagctgtcg cgacaaccat 240
 gtcatacag gggatgtaat gacaaccct tcacctgaaa tgcattgtga tgctgtcgct 300
 ggttccaact tcattttcag taataacaa 329

<210> 2484

<211> 365

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-H4

<400> 2484

gtccgggacg agtcacgcgt ctagccaggt taccagcagc aagcagagat cagatcatcc 60
 atcggcaatg tcgaacatcg ggcagtcctt ccaggccggc aaggctgagg ccagggcgga 120
 gtaccaggcg gagcacgcgg cgcagtgcgt caaggacacc gccgcagccg cggccgacag 180
 tgccgagctg cagcagcacc gccccaccgg caccgttgag cagggtggcg agacggggcca 240
 gggcgtggcg gcaggcgtea aggacacggt ggcggggcgc gcggttggcg tcacgaacac 300
 ggtggcgggc gtggcgggcg gcgtcacgaa cacggtcacg ggcgccgtgg cnggcgtcac 360
 gaaca 365

<210> 2485
 <211> 349
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-H8

 <400> 2485

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 cacggcaaaa caccttcgcc ggcgagagca tggcgatggc gtaccgtgtc ctggagggtca 120
 ccctggtgtc ggcaaatgac ctcaagaaag tgtcgctctt ctcccggact cgcactctacg 180
 ccgtggcttc catctccgga ttcgacctcc gcatcccttc ccacagcacc caagcagacc 240
 acagcaacgg ctgcaacccc tgctggaacg ccgtggtaca cttccccatc ccggctgccc 300
 ctgacacccg cggcctcgca ctccacgtga ggctccgcgc ccagcgtct 349

<210> 2486
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-A10

 <400> 2486

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 cgcgtccgcc cacgcgtccg cacaccttga gacctgcgtt gtcaccacc catcgagggt 120
 ggggccgcca gcaggttcag ccgttcctgt tcttgataaa acgagagaag gatggcagtg 180
 tttcagggag ctgtcctatt cttgtttctc ctctcgtcg cagcagaggt gggaaccatc 240
 gatgccaaaa tgggagtagc catgcccacg catgccttga taatggagaa agcgaaacag 300
 caggagacgg agaagaagga ggagaaaagc acggagaagg aagagagtca atgcttatcg 360
 ccgagtctcc agttcgaggg cttctgcttc aacagcgac 399

<210> 2487
 <211> 362
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-A11

<400> 2487

gccagtcttc gtcattgagt gctcgtggaca ccgtcaagga ttgcgggcacc gcgctgcacc 60
gccgcaaggc ggtgcatgcc agcctctccg cgctcaagag cgcggggcgtc gagggcgctca 120
tggtggacgt gtgggtggggc atcgccgagc gcgacggccc gggccgggtac aacttcgcgg 180
gctacgcgga gctcatggag atggcgcgca aggcggggct caaggccat gccgtcatgt 240
cctccacca gtgcggcggc aacgtcggcg actccgtcag catcccgtg ccgcggtggg 300
ccgcgaggga gatggagaag gaccaggacc tctgctacac cgaccagtgg ggccgacgca 360
ac 362

<210> 2488

<211> 291

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-A3

<400> 2488

ggactagcag gccgaggcac gcgtccgggc gatcatcagc agtgcggcga tgaacgcagc 60
cgtggccgct ctgctggtgt tcgccgggt gtcgctgcc gcgcgcactg tggccgcaga 120
ggcagacgcc aatgcgaacg ctgtgggaag cgcgccatcg gtgcccgtg gtcgctgga 180
catgcccag ctaggcgcca agggcgacgg caactcggac agcaccgccga tgggtgctcaa 240
cgcgtggaag cagcgtgcg acgcgacaga gcaccataag atcgtcatcc c 291

<210> 2489

<211> 213

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-A5

<400> 2489

gaccacgcg tccagacgcc ctttttttat tttttttttt tttttttaca taaatatcgt 60
atattacttc atgcaaggaa aacatgtggt gatagacata tcagatcaac gattcacagt 120
catttcatag tatgataaca aatatcccaa aatacatgtg aacttggcag tcttatgtat 180
catgccctaa agaaaatcta atggcagcac act 213

<210> 2490
<211> 116
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-A7

<400> 2490

tcaacacgta ggagatggcc gcacctattg cggctctacc gaggtttcaa cctgtgtcac 60

cagtagcacg cacagtagaa gccaacgcca acacgacagg caaaggtata ggacgc 116

<210> 2491
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-A9

<400> 2491

tcgtgggtcg atacaagact ctagagagag tctacttact ggcgaaaaga gagaattcag 60

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taattcgttg atgttgtcgt tatagttcct ctacactaca ctcgttgacc ccgcctgcat 180

ctagttttgc ccgtccatgg gcggagaatc tgaccatggg tttgtcccaa gcttgcacat 240

cagtggcgca tccagtgacc cacgtgatct ctgctttgcc gcagaaaatt tttgcggagc 300

aactgccggg tgctttgtat ttcagctttg taaatttact tttatccagt cgttctgagt 360

ccaagccgtc agtgc 375

<210> 2492
<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-B1

<400> 2492

cgggtcggta caagcctcta cacagacgcc tgcatacacc atcgctcgcc cggatcgta 60

acatggcagc cgccctccgt gtcgtcatcg ccgtcctcgc cgtcgtctcg gtctctctcc 120

ggcgcgccac ggcgggccacg gtccccaccg tcgacgaggc gtgcaagcag tacaccaagt 180

acccgagct gtgcgtcaag tccctgtcgt ccgcggcgcc ggaggcgaag gcgaaggcgg 240
 agcggggcgg gctggcgggg ctggccgggc tggcgctggc gcaggcggcg ca 292

<210> 2493
 <211> 209
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G7

<400> 2493

gagatgctca tcctgcaggg ccacgcgcag caagggtatg tggtgaggca agttgcatcg 60
 ccctcgacat cctcacgtcg tgttcgggca gcgtgagacg catcacgggc tccgcagcgg 120
 cggctagcac atccattacc aggcgtaggc gcctgggggtg acgtacgact cccaacggta 180
 cgaggccgta ccaggctatg gtcattgtt 209

<210> 2494
 <211> 351
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H12

<400> 2494

aagaacccat ccgcggctgc cagagcaciaa gaatctaacc tcgcgcttct cacgtacggg 60
 cagctcaaca acgtgtggga ggcagtctac atccaatacc tgatgggcgt gcacggcgctc 120
 atcgttgacc ggggtggagga gatctcggac gccgtggccg gttttggtct ggggaaacca 180
 ggccttggcc ggggcgggtgc tggcgtggac ggagcgaana cgcacaggc tcaggccttc 240
 tcgcagcagc agctgggggtt cctgctccgg cttatccctg aactgattga gcagcggcac 300
 tgaaggacgg tacaccacca tatgtaacat ccagttttt tgacccctc g 351

<210> 2495
 <211> 351
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-H2

<400> 2495

cgaccacgc gtccaccac gcgtccggt agagttgatg tacttgatg ggtagtttg 60

ggaagagtat gggtaaggga cgttctgagg tcgtcgaaat cctcgcgctg ggttcgatca 120

gggtgaccgc cctctcgggc tcggtggtgg cggctatcac aaccagcagc agccgtacgc 180

acctgcggag acatactatg cccattggta ccaggccgta ccaggctatg gtcctgttgc 240

tgaaggaaga cctgtgagaa tgaggcgtct cccatgttgt ggcctcagct taggctggtg 300

tctgttcata aacgggtttt tcatggctga cattccatgg ttcattggag c 351

<210> 2496

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E4

<400> 2496

ggtcgatgca agcctctaca gtgagtcac gaacagtctc gcaattccac ccaataacta 60

ataacatctc ctggaacgcc aggttccttg gaccactata tccaggagcg acgaagtgat 120

ccaccgcga gccatggaga tgaagaaggc cctctgcgcc gccctcgctg ccgccgcctc 180

ggccaccgcc gtgctggcct cggtcgccctc cgaggcgccc tccaggcgcc ccgccggcg 240

ggccggtggt gcggctggcc ctagcgcaag cggcgccgcc gccgccgccc tgcccgcgc 300

cggggcgctc gtcgcctcct tcctcgccca cgagctccac tgagcgacga cgcgcggggc 360

ggcaacgttg ggatgcatcg tg 382

<210> 2497

<211> 76

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F1

<400> 2497

ttttttttt ttttttgagt ttgcacattg attttccaac gttttgatac ttataaaatg 60

ctttttttgt tgtttc 76

<210> 2498

<211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-F11

 <400> 2498

 gacacacgaa tctacactca tgccgctaac cctcgacta gtggcggcaa tagcaccaca 60
 agtaacggca gcacgaaaca gtacagcgga gaacagcggg actgacaaca gcggcgggtga 120
 tggtaaggca ggtattcgac acaatagcgc accagccgaa gccgaagaca acggcactgg 180
 gttgccgcca tcaactgcaat ggatcaagag cttgtttctca cgcacgga caatcctccg 240
 gtcattccag cggcagatcg catcattggg agaattgagc aatacctcaa tataacgata 300
 ggcgactgtt actgcttgag cccattgggt ccaatgtaca tacgaacatc acgagcagtt 360
 ctgcatgcaa attt 374

<210> 2499
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-028-Q1-E1-A9

 <400> 2499

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 tccttcgaca tcaccaagtt gggcgccctcc ggcaatggca agacagacag cacgaaggct 120
 gtgcaggagg catgggcatc ggcgtgcggc ggcactggga agcagacaat cctcataccc 180
 aagggcgact tccttgctcg acaactcaac ttcacaggcc cttgcaaggg cgacgtgacc 240
 atccagggtg atggcaatct gctggcgacc acggaccta gccagtacaa ggaccatggt 300
 aattggatcg agattctacg cgtggataac ctgggtcatca ccggcaaggg aaaccttgac 360
 gggcanggcc cagccgtgtg gagcaaga 388

<210> 2500
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-H6

<400> 2500

atacaagact ctaccatgag tcattctcaag cccaacggcg acgcgcctat ctcgagcacg 60
gacaagcaga tctccccga cgccaagtcc ggaacggcgt actcgaagcc gcgccggctg 120
cggaccgacg aggtccccgg gatcgctcag gacttcaggc gggccgcacg gaacgcgac 180
caggctggtt tcgacgccgt cgagatccac ggcgcgacg ggtacctcct ggagcagttc 240
atgaaggaca gctgcaacga ccgcacggac cagtacggcg gcagcctgga gaaccgggtgc 300
cgtctcgccg tggaggctgt ggacgccgtc gtccgcgagg tgggcgcgcg ccgcgtcggc 360
atcaggctgt cgcccttcgt cgacttcgtg gactgcgtgg actccgaccc ggtggcgctc 420
ggccactaca 430

<210> 2501

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A11

<400> 2501

cccacacgtc cggaggactc agccaacccc atcttcatcg acatgaagta ctgccccaac 60
aagttgtgta ctgccaacgg cgctccaag gtcaccgtca aggatgtcac cttcaagaac 120
atcaccggca cctcctccac cccggggggc gttagcctgc tctgcaactgc caatgtgcc 180
tgcaccgggg tcaccatgga tgacatcaac gtctagtata gcggcaccaa caacaagacc 240
atggctatat gcacgaacgc caaaggcagc accaaaggtt gcctcaaaga gcttgcacgc 300
ttctagaccc tccatcgact gagacatctc tctacttata aattttctcc cgtccttgca 360
gtgcccacta gatgctatcc 380

<210> 2502

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F9

<400> 2502

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tgcctatgcc tgcgcaaacc gtacagccgc gtctgatgtt gctctggaca tgagagcacc 120
 cccttttcag catctatcgg cagggcagag aagtgactct tgtgataggc tgacagcaga 180
 gacaaacttg tacacgagat caaccaacgg catcgctgcc actgcagcag gagtggcagc 240
 aactactcac agaaaggctc gcgttggtcc gtttggcatg tcaaacatgt attagtgact 300
 ggatcatggc cgaatcatgg tgaatcctct gtgcggttga tgggtctatg ctgccttcag 360
 gtggctaaac accgacaac 379

<210> 2503
 <211> 366
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-G1
 <400> 2503

ctctgtgggcc gatacaagcc tctaggatga ctctgtctag tctgtgacgt tccgggtgat 60
 gaccagcgac caccgcaagg ccacctcatg gcacgttctc cccgctgact ggaagtccgg 120
 tgtcacgtac caggcatcca agaacttcta agtagccact tttcctcctc ttcttcaacc 180
 tgcatatgcc cacaagcaac catgcagatg ataacatgca tcatgcatgc atattcattc 240
 tttcgctcat gcattccgat atggtgccgg agttaaaaaa atgtaaatca atgtgcaaac 300
 tcaaatagaca tcttaaccag ttgtgatcaa tctcaaccgc taatgcattg cacacaccga 360
 atgaag 366

<210> 2504
 <211> 330
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-G10
 <400> 2504

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 ttccctacga agttcagaag ttgtcacaat gactcatatc cttggccaca cattgttttt 120
 ttttctgttc ctgttggtct atcgattctt gtaagggcgg gttttgcagt tctgtgtctc 180
 tttatgtcat ggtggactcg ttgtttttta tgttttctgt tggaacggcg tgtttcggat 240

gatggttccg tttcgtcctt gacctgggct gggctgcacg cggcgaccag agggaacgcg 300
accggcagag ggcgcaagcg cggcggcccc 330

<210> 2505
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G12

<400> 2505

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tatgtatcag atctgtagag ccttggcata cattcacaac agcattggag tgtgccacag 120
ggacattaag cctcaaaatc tcctgggttaa tctcatacc catcagctaa aactgtgtga 180
ctttggcagc gcgaaagttc tggtaaaagg cgaaccaaac atttcttaca tctgttctag 240
atactacaga gctccagagc tcatatttgg tgctactgaa tacacaacag ccattgatgt 300
ttggtctgct ggctgtgtgc tcgctgagct gcttctagga cagcctctgt tccctggaga 360
aagcgggtgtt ga 372

<210> 2506
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G4

<400> 2506

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acgacgacga cgtgccgcca catccacatg gcggacgacg ccgtcgccgg cggagcggcc 120
gttcgctgcg cagggccggc gccggcctcg ctgtcttcta gcaggaagca gcatcagcag 180
cccgacgacg ccggtgctgg cagcagcgac gaccactacc agcacgacgt gatcatgctg 240
aggcggacga tgagcggggc ggcgttcccc ccgccgatct ccgtgatgtg caagggcggg 300
cgggcgtggc tetgctgct ggcgcaccgc gaggggtggac gcctcgtgct gcggcagatg 360
cgctcgccgt cgc 373

<210> 2507
 <211> 345
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-027-Q1-E1-H10

 <400> 2507

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 ctcaaggacn agtacaacat gccggagAAC agcctccgct gcggcaaggt cntcggcctg 120
 ccgatgccac cgtcctaccg cgccgtctag agcgtcgatc gatcgcgcac ngtgctgtac 180
 acaacttaaa gagagcgaga ggggaacttt tccccgttt ctttctctag ccagccttgt 240
 ctgtcccccc ctcgtttaat ctctctctct ttttttctg tgcgttccca ggaataatac 300
 ccaaacaaaa aaaacaaagg ggggtcaaaaa tttatcatgc atgca 345

<210> 2508
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-E11

 <400> 2508

 aagcctctag aatgaatgtg atgagtccac acacgcatgc atgcatgcat gcatgcattg 60
 cgtttgcgtc tcaagagttc acttgtaaatt ttgtaatcga ggaagaaaag cacctctcga 120
 tcgattaaca tgtctagctg ctacgacatc gtgattcgac gatgttaatt aatcggcagc 180
 tttcattatg atgtgtagca gtatactgta tgattaattg tggatctttt cgaaaacaaa 240
 aactgtaata ttcgtgaaat tgtagagcct tcacctatta ttaatctatc aagtaatcga 300
 gaaaatgtaa ttaatcccaa acgtgaatac atgggtgcaaa aacatgaatg atggtaggaa 360
 aatgaaaaca acatttgaaa aaaaaagaaa aaaaaggggg gg 402

<210> 2509
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-E2

<400> 2509

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cattgcaatt acgagttatg ttgagcgccg tagcgaacgt agccaaggcc ggccacgccca 120

agcccctgac gcctggcggg cgtgtggtac acgacaacca cggcaagttc acggccgggc 180

cgtggaaacc cgcccacgcg accttctacg gcgggcgggg cgggtccggc accacggcgg 240

gcgcgtgcgg gtacaaggac acgcgcacgc aggggtacgg cgtgcagacg gtggccgtga 300

gcacggtgct gttcggtgac ggcacggcct gcggcggtg ctacgaggtg cggtgcggtg 360

acagccctag cgggtgcaag cccgacgccg cggcactggt ggtgacggtg accgacct 418

<210> 2510

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-027-Q1-E1-E3

<400> 2510

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ccctgccacc ctccaacgcc ggagcgccct cctacggcgc ggcgggcgct tccgggggct 180

ccgccgatgc ccccgccggc gcctccgagg gccctgcgag cgccagcggc ccgtctggtg 240

acgacgcgcc ggcgtccggt gctggtgccg gcgcgtcggc tgctgatgct ccggcggccg 300

cngcctcatc cggtcctctt agcgcaccag cgccatcgtc gtcgtctgag tcctccgccg 360

caccaggccc atcttctgat ggcacctcca acggcccaac aacatcgctc ggcgacgatt 420

ccg 423

<210> 2511

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-E4

<400> 2511

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ggtcacctcc atcgtcagtg aaatcaccac ctccttcacc actgttaagt tcgccgccgc 120
 caccagcgcc ggtgagggtca cctccaccgc taacgaaatc atcacctcct ccaccaccga 180
 taagggtcgcc acccccacca caagcaaact cacctcctcc atcagctcta ataagctcac 240
 ctctcctcc gatgcaatcc cctccaccgc ctgctccagt cagctcacca ccaccaccta 300
 taaaatcacc accaccgggt ccagtaagct caccacctcc tctggcgcaa tcccctccac 360
 cacctgctcc agtcagctca ctaccaccac ctgtaaaatc atctcctcca acgggtccaa 420
 ttaactcaac aacgggt 437

<210> 2512
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-027-Q1-E1-E5

 <400> 2512

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 agagcggcgg agagcggcga ggcggcggag gcgaagaaga tccaggacga cttctgctcg 120
 acgctgtgcg agggcaagaa ggggacggac ctggctgtgt gcaaggagtc ctgcgcgctc 180
 tcccagcagt ccaacctggt gctgtacggc aggatccagt gcaagggcaa gtgcaccgag 240
 cagaagggca tcacggcgcc ggccatgaag gtctgccagg aggagtgcga caaggcgtac 300
 gtggtgaagg cggccgaggt caccaaggcc tgcagcgtca cctgcgcaa ggagaagaac 360
 cgcgctcag ccagaactgc aagaggtcct ngcacctcc tc 402

<210> 2513
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-E7

 <400> 2513

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 ccttttccga cattcacagg ggggacagga aatcagcggc catggcctcg attccggcga 120

cgaccttcgc cgatcatctta tccgtcctct tctgtgccgc ggctggcacc gccgtcgaca 180
acgacctccc cgactacgtc atccagggcc gcgtctattg cgacacctgc cgcgccgggt 240
tcgtgaccaa tgtcaccgag tacatcgcgg gcgccaaggt gaggctggag tgcaagcact 300
tcggcaccgg caagctcgag cgctccatcg acgggggtgac cgacgggaac ggcacgtaca 360
cgatcgagct caaggacagc cacga 385

<210> 2514
<211> 384
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-027-Q1-E1-E9
<400> 2514

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caggtgacat tgcttacatt gattatctat tcttggggga ttatgtagat cgcgccagc 180
atagttttaga aactatcact cttcttcttg cattgaaggt tgaatatacct caaaatgtac 240
atgtgattcg aggaaatcac gaagctgcag atatcaatgc tttgtttggt ttccgaatag 300
agtgtataga acgaatgggc gaaagagatg gtatctggac atggcatcga atgaataggc 360
tatttaattg gcttcctttg gctg 384

<210> 2515
<211> 363
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-027-Q1-E1-F10
<400> 2515

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acgccggaca acaaggggca cgggcatccg ctgcccaagt ttggggagtg ggacgtgaag 180
aatccggcca cgtccgaggg cttcacgtc atattccaga aggcccgca cgacaagaag 240
accaccaccg gccctggggc tgggaacgcg cgcgaggca ttccgccggc cttcaggaac 300

ggcggcgcgcg acggcgggta caggcccgcac ttcggcgacg gcaaccagta cacgccgccc 360

aaa 363

<210> 2516

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F11

<400> 2516

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ctcctccgtc tccaccggcg caagccacac ctccaccacg tcgccgtcgt cctccggcgt 120

cgtcgtcaag gacgtcgtga aggatgcggc ggcgggccggc gaggtgatga cgcccgccga 180

cgccgagaag cctatctctg tcgaccccaa ggcagacgcc atcgtggtga tggacgccaa 240

gaaagaggag ggcaacaaca aggtggccgt ggaggaggat ctgcttcctg aatccaccat 300

ggccgacgag gcgcttgctg tggatgaggg gcccaagggt gacgaaccac tcaaaatcaa 360

ag 362

<210> 2517

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F12

<400> 2517

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gtggccgctc tgctggtggt cgccgcgggt tcgcctgccg cgcgcgcggt ggcggcggag 120

gcggaggcga aggcgaaggc tgtgggaggc gcgccgtcgg tgcccgtgg ctcgctggac 180

atcgcgacgc tgggagccaa gggcgacggc aagtcggaca gcacccgat ggtgctcaag 240

gcgtggaagc acgcgtgcga ggcgacgggg cagcagaaga tcgtcatccc caagggcaac 300

tacctgacgg gcgcgctgga cctggtgggc ccctgcaagt cctccatcat catccgcctc 360

<210> 2518

<211> 324

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-C5

<400> 2518

gacccacgcc tctacagtca gtcctcgaaa ataatgaaga gccgcagcat ggcacatcgc 60

gccgcgctct tgggtgctagc cctcgcgcta gtggcggcca ccgccccaca ggtagcggag 120

gcaaagaaga agagagcggc ggagagcggc gaggcggcgg aggcgaagaa gatccaggac 180

gacttctgct cgacgctgtg cgagggcaag aaggggacgg acctggtcgt gtgcaaggag 240

tcttgcgcg ctcctccagca gtccaacctg gtgctgtacg gcaggatcca gtgcaagggc 300

aagtgcaccg agcagaaggg catc 324

<210> 2519

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-C7

<400> 2519

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agggcatggg gcctgggtgct ggttcaagct ccgctggctc ctcgagggcg ctggccaccg 120

tgtcacgtgc gttgacctgg ccggaggcgg cgctgatcct accgaccca acaccatccg 180

gtccttcaag cagtacgaca agccgctcat agacctcatc tccaacttgc cagacggaga 240

gaaggtgatt ctgatcggac atggcgctgg agggctgagt gtgatccatg caatgcatga 300

atttggtgac aggatcgggc aagcattttt cgtggccgcc acaatgctgc cgtttggatt 360

tcaagccgat gaagataaga acgatgggtt accgac 396

<210> 2520

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-D10

<400> 2520

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accggccccc gcgcgcgtgc cgtacgtgcc agggacgacg ccgggcggcc gatggagttc 120
acgtcgtcct acttccacgc cttcggcaac cccgacctcg cggcgggtggt ctccggcgac 180
ggcggcagcg cgcaggccca ccggccgcgc cgctccaccg acggcgcgaa ggcggaggac 240
ggcaggagcc ccaccaccac aacggcgagg cgcgcgccgt ccatgttctg cgtccccgac 300
acggaggcgg aggagcccaa cggcttcctg gacgagtga ccctctgccg caaggcgctc 360
tgcggcgaca tcttcatg 378

<210> 2521
<211> 323
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-D12

<400> 2521
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accggcgagc accgggggcg ctctccgtcc gctaccgacg gagcaacgcg ccgagctaag 120
atgtgctagc atacgtatgt agccgagcaa ctgatgtgcg aaatagacgg taagcaactc 180
acttcggcgg ccattcttcgg ccacgacggc gccatgtgcg ctcagagcag cgcagtcacc 240
gagttcacgc ccaaggacat ggatggcatc atgaacgact tcgacgaccc ggtgcagctc 300
gcgtggacct gcctgatatt ggg 323

<210> 2522
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-D6

<400> 2522
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atgtcgccgc gacggcggca ccgaccgtct gtgcgggtcaa atctccggcg agcacaacga 120
ccacaaggaa acacgaagca gccaaagaag agacggatgc gcctgccaag gcaccagctg 180
ctgcagccac cgagggggcct gctgcgggag cgcccatgac atggccggat ggcgggcctg 240
agttcgtaa gatggtcatc aagaaccct tctttaaaag cgcacctcca tctggtagcg 300

aagacggcct acccattgac ccactccag aaggcagcat gaactaaatt aaataccaat 360
 tacgataccg accagatatg catggagcat gcaagaatgt tgcgaacga atatatgcta 420
 tgaatgggta catgt 435

<210> 2523
 <211> 393
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-D8
 <400> 2523

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 gctggtcgcc gtgctagcgg tggccgcca tgctgcgaac gccggccacg ccaagcccct 120
 gacgcctggc gggcgtgtgg tacacgacaa ccacggcaag ttcacggccg ggccgtggaa 180
 accgcccac gcgaccttct acggcgggcg ggacgggtcc ggcaccacgg cgggcgcgtg 240
 cgggtacaag gacacgcgca cgcaggggta cggcgtgcag acggtggccg tgagcacggg 300
 gctgttcggg gacggcacgg cctgcggcgg gtgctacgag gtgcgggtgcg tggacagccc 360
 tagcgggtgc aaacccgacc cggcggcact ggt 393

<210> 2524
 <211> 351
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-C12
 <400> 2524

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 ctgatggggg cgtggcgcaa ggcctacggc gccctcaagg actccaccaa ggtcggcctc 120
 gccaaagtca acagcgaatt caaggaattg gatattgcaa ttgtgaaggc aaccaaccat 180
 gttgaatgcc ctcccaagga acggcacgac agaaaaatac tcttggcgac ctcagcaaac 240
 cgccctcgcg cagacctctc gtactgcata tacgcattgt caaggagatt gtccaagaca 300
 aagaactgga tagttgcgct caagacattg atagtgggtgc ataagcttct g 351

<210> 2525

<211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-A5

 <400> 2525

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 gattcagact ggtgccattc gatttgattt ggcgcggggg actttcctat ggccgcctcc 120
 atcgcggcct cgcccttctt tccagggtcg ccggcgccgg ccgctcctaa gaacggcctt 180
 ggagagcgcc cagagagcct ggacgtccgc ggcgttgccg cgaagccggg agcctcgtct 240
 aatgccgtga gggcggggcaa gacgcgcgcc cacgctgccg tccccaaggt gaacggtggc 300
 aagtctgcgg tggcggatgt ggaacacgag accgtaactg taccttcgtc ggtgc 355

<210> 2526
 <211> 386
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-027-Q1-E1-B12

 <400> 2526

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 aattgggggg aggctcctct ccgccgttgg aaccgctgcg gcgtcgcagc ctgtgcgact 120
 ttctgtctgg ttctcatcc ctcagggaca gattttgcat tctttggcat tactgtttga 180
 tggcagacag tagtgctcct tctctgtgga ggcattgggg caaaaggcag ttgaactgaa 240
 cgggcacatc aatagtctct ggcctccaag ggaaattggg aaattcagat tgaacgtggc 300
 tgcattcattt ttctttcat tgggtctttc agcaacagcg atccattctc gtanggggga 360
 gagagagaga gagagagagg gagaga 386

<210> 2527
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-B3

 <400> 2527

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 cgcgtaggta gtcttcatct acagaggagg ttgttttaat tttctatgca ctctacagtg 300
 caaaaatata ttttacacag cc 322

<210> 2530
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-A4
 <400> 2530

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 tcgcccttcg ttcacctctc ctctctctcg tccctgcctg ccagggagag gggaagtcag 120
 aggcacggag tggcgcagag cagacgcccg tgaaccattg tagctgtccc tgctgctgctc 180
 gtcgtcaacg aacccacaca aggaaggat ggagaagaag ccgaccatcc tcatgaacag 240
 gtacgagctc gggcgcacgc tcgggcaggg caccttcgcc aaggtgtacc acggccggaa 300
 cctcgcgtcc ggcgagagcg tggccatcaa ggtcatcgac aaggagaagg tgatgcgcgt 360
 cggcatgata gaccagatca agcgcgagat ctccgtcatg cgcctcgtcc gccaacccaa 420
 cgtcgtgc 428

<210> 2531
 <211> 269
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-026-Q1-E1-G3
 <400> 2531

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 tcgatgagca cctcatgtgg cgagatcgag ggccaccacc tgagctctgc cgccatagtc 180
 gggcacgacg gcgccgtttg ggcccagagc accgcattcc cacagttcaa gccagaggag 240
 atgaccaaca tcattaagga cttcgacga 269

<210> 2532
 <211> 217
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G6

<400> 2532

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 cctaccgggt ccatgtcgtc ctcatcggac acgtgaacca cgtgcaagtt gatccaacgg 120
 gcctgtgcaa atacacgcat gcaacgttct agcggcgtgc agaactcgtc tggcaacacg 180
 gcggagacgc gctgagagta tcagcgacag cccacgc 217

<210> 2533
 <211> 342
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H1

<400> 2533

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 gccgtcctcc ttttttcccc tcttatattt gatcggtttc tttgcgtcgt tcacgcaggg 120
 atcgtcggag aggaatcgca aagagggccg tctcatccga gttaaggaag ccatggagca 180
 caaggaggct ggggtgccagg ccccgaggg acccatcctc tgcatcaata actgtggctt 240
 cttcggcagc gcggcgacca tgaacatgtg ctccaagtgc cacaaggaga tgataacgaa 300
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<210> 2534
 <211> 335
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H12

<400> 2534

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 cgtcttcaag gaagacgggc aggagtatgc gcaggtgacc ggatgctcgc aacggcgggtg 120
 ccaggccacc tgcgtggacg gcacgcgtcg cctctgccat atccggggca agatgcacaa 180

gaagggtgtgg atcgcggccg gggacatcgt cctcgtcggc ctccgcgact accaggacga 240
 caaggccgac gtcacacctca agtacatgaa cgacgaggcg cgctgtctca aggcctacgg 300
 ggagcttccc cagacgctca ggctcaacga gggcg 335

<210> 2535
 <211> 309
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-026-Q1-E1-H3
 <400> 2535

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 acagacagca cgaaggctgt gcangaggca tgggcatcgg cgtgcggcgg cactgggaag 120
 cagacaatcc tcatacccaa gggcgacttc cttgtcggac aactcaactt tacaggccct 180
 tgcaagggcg acgtgaccat ccaggtggat ggcaatctgc tggcgaccac ggacctaagc 240
 cagtacaagg accatggtaa ttggatcgag attctacgcy tggataacct ggtcatcacc 300
 ggcaagggg 309

<210> 2536
 <211> 201
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-026-Q1-E1-H4
 <400> 2536

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 acctcttcat ggaaggcgcc tacttcaccg tcaccggcgg ccagatcaac aggcagttca 120
 acaagaagga cctcatcaag cccaggaacg gggccctac gtcaacaagc tcacgcgcta 180
 cgccggctcc ctcgcctgca c 201

<210> 2537
 <211> 296
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H6

<400> 2537

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ctctccaaga ccatccagct ggccggctgg acagccatat gctaaatcgg gatcacggac 120
aaggtgacgc tcgcggaatt caactgcact gggccgggca ctgacgtgac gaaccgcgtg 180
ccatggctgc ggaggttctc atctcgacca cacagccaag tacctcacga tcgacttcat 240
caactgcaag gactggctgc cggcgacta ctactgatcc gacaatcgac tgctgg 296

<210> 2538

<211> 308

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H8

<400> 2538

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acttgcaacg tcgatgctgg ctgcgctgtt tgcggttggg ttgtgcacca ccccgctcac 120
cttccagggtt ggcaagggat ccaagcctgg ccacctgatc ctcaccccca atgttgcaac 180
catatccgac gtggagatca aagagcacgg gggcgatgac ttctccttta cgctcaagga 240
gggcccgaac ggcacctgga cgctcgacac caaggccccg ctcaagttac ccctttgcat 300
ccgctttg 308

<210> 2539

<211> 218

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A11

<400> 2539

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tcgccttgct cttcttcgtg gcgtgtgtgg ccggcagcgt cgcgctcgcg tcgtcgatgt 120
gctcgggatt ccgtcgcaag cgggacgcgg ccacctgtgc agaccgggcc gcttcggggcg 180
agtcgagcgg gacgggctcg ggctccgtcg ccggtggc 218

<210> 2540
 <211> 94
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-A12

 <400> 2540

 ctgacagcga cgatgatgcc acaactgCGT cgCctcgtcg cgctgggcct cgtggccacg 60
 ggCagtagcg cggcgcccgG gcgttgggtt tgtc 94

<210> 2541
 <211> 229
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-G10

 <400> 2541

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 gtcctttcttc ctgcctccg ttccgttccg ttccgtcccg cccgccgcg cgcagcatt 120
 cagggatgga catgacgagg atcgccagcg ccgtcctcgt cggccccgct gtggacatcg 180
 tggcgtcttt acctgaaggt ggagacgttg gatttcatgt cttcggttg 229

<210> 2542
 <211> 291
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-A9

 <400> 2542

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 attgatctct acgacggcat cggtgacggc gaccacagtt cagtcacgga aggcggggct 120
 cattacctcg cggctcagac gcaactggatt ccgggcctag ctgatggatg tgctatagcc 180
 ggacaataca tcgggagaaa cttgggcggc accggcgctcc ataggcaacc gcatgttctc 240
 atgatgcgac ttctgtcttc gttgactcat ccagatgcag ttacaccgac c 291

<210> 2543

<211> 194
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-B5

 <400> 2543

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 aataaagttt acagcatgaa atggattgaa aaaaagtggg agtaaatagac tgaaataaaa 120
 aggtggaagc tctataggat gacgttactg tgttgtaagc gtagatcaca aaagtcttat 180
 ctatggggac ttgt 194

<210> 2544
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-H4

 <400> 2544

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 tgctacaaga ttaaggcgtg gtccccatac tgagtacatt atatctcttg atgcagagga 120
 cttatcaciaa gggagcaatt catacatggg aaaactgaga tctgatttct gggggacaaa 180
 cttcaaaaata tatgatagca agccaccata tgacggcgct aaagcatcaa gtagtcgac 240
 tagtcgtcgt ttcggaagca gaaggattag tccccagta tcgtctggta actatgaaat 300
 tggacaggtt tcatacaaat acaacttgct caaatccaga cgccccagga gaatgaattg 360
 cactcttgaa tgcccttcag cgcaagagac ctgggaaaac tcactcaaga c 411

<210> 2545
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-F1

 <400> 2545

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 gtgcatatat atattcctgc caagataaag gtaatggagt cgtcacgcag gttccagccg 120

gccgtcatcc tgtttctcct gctcattgtg tccaccgata tggcacaggc aaggggaatgc 180
gagaagtaca gtgagcgtatt tgttggggca tgcattgatcg cagacaactg cgccaatgtg 240
tgccgcggtg aggggttctt ggccggcagg tgcagcacct tccgccgccg ctgcatctgc 300
actaggcagt gctaaacaag atcgctcgat cgttcgccat gcatcgacaa cctattctta 360
ataacgttca ttatctcggtt cttatttatg acgaatgtca tgtatgttct ggtgactgtc 420
atgtatatcc tgatgactgt catg 444

<210> 2546
<211> 335
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-C3

<400> 2546
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ggcctgctgc ttctactact ggccggggcg tcgacagcga cggcgcatct caccgtcggc 120
gatgtggatg agtacgtgtc caagcgcacg caggagtccc gccacaggaa caacggtggc 180
gcgggcatcg atgacctcat ctccagtgcg gcgcgcttcc acgccaacgt ggatgcacgc 240
gcctatggcc gtagatccga cctgcaggac gaggcaacag ctaccgtaat agccaaagcc 300
gaagcacaag aggccttcagc tgaaggtggc gatta 335

<210> 2547
<211> 146
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-B11

<400> 2547
cctcgccgt cctcgccgcc gccgcctcgc ctgccgtggt cctcgccgcc ggggccccgg 60
cgcccgtcct caccagcgcc tctcggtcgc cgttcccggc cgtcggcgcc gtgctggggc 120
cctccgtgct ctctttcttc gctac 146

<210> 2548
<211> 376
<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-001-Q1-E1-B4

<400> 2548

gcacgacgag gacgaagccg tgcccgaagg aaaaagacgt ggcggttgta agggaggatg 60
tggaagcggg tgccgagaca gagacagaga ctgaaagcga ggctgaggca gaggtcgagg 120
ccgangtgga cgtcgagggt gaagcgggaag ccggtgcac gtctgcgaag aagaaccgta 180
tccagggtgtc caccaacaag aagccgctct atttctacgt caatctcgcc aagaggtaca 240
tgcagaacta cgacgaggtt gagctctccg ctctggggat ggccattggt aacctgggta 300
acgtcgctga gatcctcaaa aacaatggcc tcgccactga aaagaacatc ctcacatcaa 360
ccatcggcac caatga 376

<210> 2549

<211> 341

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A12

<400> 2549

gacaagccgt ctactggctc atgttcgtct ttgtcttgat gcgattgac tctacgacgg 60
tcaagggtgac ggcgacaaca gttcagtcgc ggcaggcggc gctcagtacc tcccgcacaa 120
gatgctctgg attccgagca tgacggaggg atgtactgtg gccggacagg acagctgggtg 180
aagcttgggc gccaacggag ccaaagtca aaggcaacgt cgcattgagg cacttcgggtc 240
gtcggtgact catccacatt cagtcacacc cgtccaatcg acatcgtttc atgacagatc 300
gaccagctag ttaacatttc ccatttcact ggcgtgtggt a 341

<210> 2550

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A4

<400> 2550

ccgggtgccc ccacacgtcc gagcaaacct ccgatccctg ctgagagcaa gggatggcgg 60

cggcatgggc agtgctggcg gcggctctcg tcgcggcgca ggtggcgtct gcggcgccgg 120
 tcacggcgcc agcgttcctc tgggcgccta agaactacgg attccgctct gatgatgcta 180
 aggaggtagt ccattatcaa acaatctcac caaagaactt agctaaatct gttcttgagg 240
 aagggtggctg gtcaaccttt atgtgttcaa gggaggatac tgagaagcat gttgatgttg 300
 ccattgtttt tattggctca aagctacaat catcagacat atcgaaagat aagcaagttg 360
 atccagcttt agcagatata ttgaagctct ccttcacaga atcagagttt tctatggcat 420
 tcccctacgt ttccacatca gacga 445

<210> 2551

<211> 511

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-G8

<400> 2551

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 catgagaatg ttgtccaact cgtcggatac tgcgccgaag ggagcaccca cgtccttgct 120
 tatgagtatg caactagggg atcattgcat gatatcctcc atggtaataa ggggtgtcaaa 180
 cgagcccatc cagggccagt cctgtcatgg atgcatcgag ctaggattgc cgtatgtgct 240
 gctcggggtc tcgagttcct ccactagaac gccgatactc atgtgggtcca ccgcgacatc 300
 aattcaagca gcatactgct ctttgaccat gatgttgcca acatcgggga cttcgacatc 360
 tcaaaccagt cccctgacat ggctgcgcgc ctccactcta ctgcggttct tggcaccttt 420
 ggctatcatg caccagaata tgccatgact ggacagctta gcacgaccag tgatgtctac 480
 agctttggag ttgtgctgct ggagctttta a 511

<210> 2552

<211> 504

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-H1

<400> 2552

gggacgaccc acgcgtccgc ccaagcgtcc gccatttcc tccttcgtcc gcatcaggga 60

cacactgcct ccgcatgcgg caagatcctc cctcattccc caaacatgag aggagcagag 120
 gaggagagat ctggcgccgc cactgatgcg ggaggagagg aggagaaacg ggagaggagc 180
 gtcggcctga tggccggcct catggacaag gccaaagggt tcgtggtgga gaaggtgacg 240
 caaatcccca agcccagggc tgcgctggat cacgtctcct tccagagcat cagccgcgag 300
 ggcgtcgagc tgcatagcc a cgtcgacatc agcaaccct actcgacccg catccccatc 360
 tgcgagatca cctacacgtt caagagcgcc ggcaagggtga tagcgtcggg cacgatgccc 420
 gaccccggtt ggatcgccgc gagcggcagc accaagctag acctgccggt gaaggtgccg 480
 tacgacttca tcgtgtcgct gatg 504

<210> 2553
 <211> 486
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-049-Q1-E1-H10
 <400> 2553

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 cgcgcgcgga gcggatcatt gcggagggtga tgcacacgaa gcagatggcg aacccgacga 120
 cggccgcggg cctgtctcgc gtcacatcc acgactgctt cgtcagcggg tgcgacgcgt 180
 cgggtgctgat cgcgtccacc cagttccaga agtcggagca cgacgcggag atcaaccacg 240
 ccctccccgg ggacgccttc gacgccgtgg tgcgcgcaa gctggccctg gagctggagt 300
 gccccggggt ggtgtcctgc gccgacatcg tcgactggc gtcgggcgtg ctgatcacca 360
 tgaccggcgg gccccgttac ccggtccgc tggggcgcac ggactcgctg tcgtcgctgc 420
 ccacggcgcc cgacgtggag ctgccgcag ccaacttcac cgtggaccgc ctcatccaga 480
 tgttcg 486

<210> 2554
 <211> 309
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-049-Q1-E1-H11
 <400> 2554

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 cgactccgtc agcatcccg c gccgcgggtg ggccgcggag gagatggaga gggaccagga 120
 cctctgctac accgaccagt ggggcccgcg caactacgag tacgtctcgc tcggctgcga 180
 cgccatgccc gtcctcaagg gacgcaagcc cgtcgagtgc tacaacgact tcatgcccc 240
 gttccgcgaa cactttgccg actacctccg caacaccatc ctggaaatcc aagtccgcat 300
 gggcccccgc 309

<210> 2555
 <211> 498
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-H2

<400> 2555

gggtagaccc acgcggccgc gcagacgtg gcatcctcga ctcaaccaac gagggcaagt 60
 gcatcccggt gtcgacgcag gtgcgtact tcaacggcac caaggcgaag atggtcgcca 120
 agaagggcgc cgccgcgggt agcaagctgc tggccgactc cgtcatcctc atgggcatcg 180
 ccaacaacga cctgttcgtg ttcgctgccg ccgagctgtt gcggggcagg tcggccgcgg 240
 agcagaagag cgacgccgcc gcgttctca ccgacctgct gtccaactac tcggccgcca 300
 tcacggatct gactccatc ggcgcgagga agttcgccat catcaacgtg gggctggtgg 360
 ggtgcgtgcc ggtggtgcgg gtgctggacg cggacggcgg gtgcgccgag gggctcaaca 420
 agctggctga agccttcgac gtcgcgctgg ggccgctcct cgccggcctc gccgacaagc 480
 tgccggggct gacctact 498

<210> 2556
 <211> 472
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-H3

<400> 2556

gggtcgaccc acgcgtccgt gataatccag agaaggaact aaagccaggg atcgatcttc 60
 ttgggaaggt ggacgagtta tttatcgaca tatatgacag atatgaacct accaatgact 120

catcagcaga caattgtttc atctcaacaa gttatgatgc cacaacacac tttgagtcca 180
ctgttatgga tgtactttcc ctttacacaa agatcaccgg aaagactggt gatctcagcg 240
tggatctaag cgctgctagt gctgctgaag atgatatgtg atacttatcg tagtgctatg 300
tggcgtagtg tggaaaatat ttaattaagc tttgctttgg caacgattat taggttcacc 360
tttatttttc caattgttgt tattagctgt gttgtgacca tgattaaaga ttgcatgctg 420
taaatttgaa ggcatttttt tatcaaaagt tgttacgcgg tgattcgtgt tt 472

<210> 2557
<211> 312
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-H7

<400> 2557
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aataaccctg cgtgcccttc gttctcgtct cgatcccgac gacgctccct tcggctccgg 120
caaaccacat caagtcgcga tggagatgaa gaaggtcgcc tgcgccgtcc tcgccgccgc 180
cgcctccgcc accgtggtcc tcgccgccga ggccccggcg cccgccccca ccagcgcctc 240
ctcggccgcg ttccccggcg tcggcgccgt gctgggcgcc tccgtgctct ctttcttcgc 300
ctactacctg ca 312

<210> 2558
<211> 482
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-H8

<400> 2558
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ttgcgatggt tgtggcggtg gtgttcttgg tgagcggcgc atggtgcggt cctcccaaag 120
tccccccagg caagaacatc acggccacct atggcaagga ctggctggac gctaaagcga 180
catggtatgg caagccgacg ggtgccggtc ccgacgataa cgggtggcggc tgcgggtaca 240
aggacgtgaa caagcccccc ttcaatagca tgggcgcgatg cggcaacatc cccatcttca 300

aggatggtct gggttgtggg tctgtcttcg agattaagtg cgataagcct gtggagtgtc 360
ccggcaagcc cgtggtggtg cacatcacgg acatgaacta tgagcctatc gcggcgtacc 420
acttcgattt agcaggcaca gcgttctgcg ccatggtcaa caagggcgac gaggagaagc 480
tg 482

<210> 2559
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-H9

<400> 2559

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gtgtacctgc agatcatcca aatgagaaga cttttgtggt gggatttgag gaagtccatg 120
aatcagatgg ttcgccaggc tcgcatggac aatctacaaa ggacagcgcc ctttctgcga 180
acggtggtgg ggcagcaaag agcaactaca tatcgcccg cccaacacgc atcgctgtcg 240
accgcaacgg cagtgtgaag aatgcttccg tcgctagggc caacttgaca tctcctcggc 300
catcagagat catctctgcc agggacagca attccacgac ccagcaagaa gtgaaagcgc 360
tcctctctca gatgtcatct gtgcggggcc tcgatggttc ttccagtga ggaatctccta 420
gccccgggta cagcgctccg aacgaag 447

<210> 2560
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-A3

<400> 2560

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gctccgacga ctacgacgcg ccgccacagc cacatggcgg acgacgccgt cgccgccggt 120
gcggccggtt gctgctcagg gccgggctcg ctgtcttcta tcacgaagca gcagcagcag 180
cccagcagc ccggctgcgg cagcagcagc agcagcagc actaccagca cgacgtgatc 240
atgctgaggg ggactaggag cgggcgggca ttcccggcgc cgatctccgt gatcggcaag 300

ggcggggcgc cgtggctctg cctgcgggcg caccgcgagg gtggacgcct cgtgctgcgg 360
cagatgcgcc tgccgtcgca ggagctgctg catccctgca aggacgacgg ca 412

<210> 2561
<211> 400
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-B11

<400> 2561

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ccccggcaag cgaagcaact cctcgcatgt ctccatcaag aacgtcacct tccgcaacag 120
cggccggcac gtcgtccacg cccgaagccg tcagcctgct ctgctccgag acgcagccgt 180
gcagcggcgt ctgctcatc gatgtcaacg tcgagtacgc cggcaagaac aacaagacca 240
tggctgtgtg cagcaacgcc aagggaaccg ccaagggaag cctccaggcc ctggattgcc 300
tcgtctgac gatgacctg catttgcatg cattcttctt ccgtttcact tttccatatt 360
ctattgcgtt ccagccaagc atcttgtttc ttttagatat 400

<210> 2562
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-B6

<400> 2562

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tccattctcc agcgcagcga agtaaacadg tctgaccggg caaagatgtc gtggcaggcg 120
tacgtggacg agcacctgat gtgcgagatc gagggccacc acctcgcggc ggcgccatc 180
gtcggccacg acggtgccg ctgggagcag agcacggcgt tccccgagtt caagaccgag 240
gacatggcca acatcatgaa ggacttcgac gagccagggc acctcgcgcc gacaggcctg 300
ttctcggac ctaccaagta catgggcatc caaggccagc ctggtgccgt catccgtggc 360
aagaacggat caggaggcat caccgtgaag aaagacaggc aggcactcgt gg 412

<210> 2563
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-B8

<400> 2563

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tccgacgacg acgacgcgcc gccacagcca catggcggac gacgccgtcg ccgccggagc 120
ggccgtttgc tgcgcagggc cggcctcgct gtcttctagc aggaagcagc agcagcagcc 180
cgacgacgcc ggctgcggca gcagcagcag cgacgaccac taccagcacg acgtgatcat 240
gctgaggcgg acgaggagcg ggcgggcatt cccgccgccg atctccgtga tcggcaaggg 300
cgggcggccg tggctctgcc tgcgggcgca ccgcgagggg ggacgcctcg tgctgcggga 360
gatgcgcctg ccgtcgcacg agctgctgga gcctcgc 397
```

<210> 2564
 <211> 451
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C10

<400> 2564

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gcggaggcag aggtcgaggc cgaggtggag gtcgaggtgg aggcggaggc cggtgcatcg 120
tctgcgaaga agaaccgtat ccaggtgtgg accaacaaga agccgtcta tttctacgtc 180
aatctcgcca agaggtacat gcagaactac gacgaggttg agctctccgc tctggggatg 240
gccattggta ccgtggtgac cgtcgtcgag atcctcaaga acaatggcct cgccactgaa 300
aagaagatcc tcacatcaac catcggcacc aaggatgagg cgaatggccg gcttgctccgt 360
aaagccaaga tcgagatcct gctgtgcaaa tcagaaaact tcaacagcat catgtcgagc 420
aagaagtccg agcgccccgaa gccgccccgc g 451
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<210> 2565
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C11

<400> 2565

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ggaggagggg accaggccga gggcaggagc ggtgccgagc agcagcagcg cggcgccgcc 180
gctcggcatg gcagcagtgg ggagcaccag gtgcacgacg tgacaccgag gccgtcggcg 240
cccgcgctcg gcatgggggtg gcggcaccca gcgatgtcga cggcgtggc ggagccggcg 300
tcccttgtgc cttattcca gtcgcagtgc gcgttgagg tgcgcaacgc gcagcagtga 360
gggggaatca tttgtcaac caagcagcca tgcccatagt gcgctcgagc tcgtgctcac 420
gacaggcgcc gctacgatgt gagaagacg 449

<210> 2566

<211> 462

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-050-Q1-E1-C12

<400> 2566

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tcggccacga tctcttgga aaaagcttac cctgtgtctg tctgtccgac cgtcagtccg 120
tctaacaatc gatttccatg acgacgtcgc cgcgcgtgtg gctgctcgcc atggcactgg 180
cgctcgctg cggtgtgtc gtgaggtccg ccgacgtgc tgccgaggcg tcnccgactc 240
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tggggggtgt gctgccgggc ggcggcatcg acctcgacgg cgacggtgac gaagacgagc 360
tgccgcagtt ccagccccac ctcatgatcc tcggccatgg ccaactgatga gtgtaaatgg 420
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<210> 2567

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C3

<400> 2567

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aaacttcagc agtgatgccc tcattggcga gggctcgtat gccagagtct attttggtgt 180
gctgaaagat gggacgaaat ctgcagtga gaagcttgac tccagcaaac agcctgatca 240
agaattcctt gtgcaggttt cagctgtctc aagattgaag catgagaatg ttgtccaact 300
cgtcggatac tgcgccgaag ggagcaccgc cgtccttgct tatgagtatg caactacggg 360
atcattgcat gatatcctcc atggtaaaaa aggtgtc 397

<210> 2568

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-C6

<400> 2568

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gaaatcaagg acctgccaaa actatctgac gagctccatc tcaaagataa taagggtgcta 120
cagaggatct ccaagctgcc catgcttcgt tccctcatta tcgatgactg ctcaaagttg 180
aagcatgtgg caggtcttga tgcgctgcag cacctcagac ttgtctttcc tccgtccacc 240
gagacatttt atttcgaaga gctagtaatt ttctggagcg ttgccttccc acgggtggctg 300
gagctactga ttcagaagtg caaaggcctg cgacggtttg agttgcagtg tcgtctgtca 360
ttgc 364

<210> 2569

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-D10

<400> 2569

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atggcggttca tcagcaatat cgcagtgaag gcggcgggccg tggccgcgct gctgctggtc 120
gcagcggtgt cgcctgccgc gcgcgcggcg gcggtggcg tggcgggagg ggcgccgtcg 180
gtgccggcg gtccgctgga catcgcgcag ctgggcgccca agggcgacgg caagtcggac 240
agcacccca tgatcctcaa ggcgtggaag aacgcgtgcg aggcgacggg ggtacagaag 300
atcgtcatcc cgccgggcaa ctacctgacg ggcgggctgg agctgaaggg cccctgcaag 360
tcctccatca tcatccgtct cgacggcaac ctgctcggca ccggcgacct cagcgcgtac 420
caaaggaact g 431

<210> 2570
<211> 448
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-050-Q1-E1-D12
<400> 2570

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gtggagagca gtggcgggcg cggcgacggc agcgcgggga gcgacgaggc ggcacgtcc 120
atgttccaga ggttctggga ctccgccatg gccttgggcc ccctggacga cgagacggac 180
accagtccc agatgagcga ggcgtcgagg tcgcagatga tgatgtccga tgtccaccac 240
caccaccacc accacgactc cgcggggcggc ggcagcgagg cggggttctc gctgtcgtcc 300
ttctccttca agctccagga caggcgaagg cggatgcacc gcttcagctg tgaggttcag 360
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cgctaccgc aaatcctgta cgaagacg 448

<210> 2571
<211> 418
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-050-Q1-E1-D7
<400> 2571

cccacgcgtc cgaggacgcg tggggccgcc gccactaggg gcggttccag ccaccgtcgc 60
catggcgtag ccttcgggtca attcctggcg gcatttcgcy gcggcgacg gatccggcct 120

gcgcggtccc gcggcggtgc cagcacgcga ccccgcggcg gcgggcgggc acggccttgg 180
 cgctgcccc ccacgcatcc tggcgcccc gacggccagg gcgcggccca ctggcgcggtg 240
 gccggccatg gcggccccctg gcggcgcggt cccgcacggg tgcgtcgccc gacggcctgc 300
 gcgctgccgt cgctcggctc agacgggcct cggtcagcgc gggcaggcac gacgagcgcg 360
 tgcgggcggc ctctccggc caaggcggcg cgtctcgtgg cccaggccat gggcgccc 418

<210> 2572
 <211> 432
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-E1

<400> 2572

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 gccaaagccgg cgcacgtcgc cccggggctc acgctcacca ccgagcccca accaattaat 180
 aatatatata tatagctagg atcgatcgtc agtaaaatgg caggctccgc cgtcctgagg 240
 agccccctgt ccgtcctcct ctacatcctc gccgccgtgc ccgccaccgc cgcggcgacg 300
 ccgaccgacg ccgccatcga cgaggcgtag gcgcatctcg tcaacctcac cgctaaccag 360
 gagtactggg cggagcgcg gcggggcggc cagcggtaca accgcgcggc gtaccagacc 420
 gacccgtggc cg 432

<210> 2573
 <211> 404
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-050-Q1-E1-E12

<400> 2573

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 gattgcccgg tgctgcccta caacacgtgc cagagcccca gcaaggcana gtcgtgcagc 120
 tacttccaga agacgcagga cggcacggtg acgatcggca tctaaggga aggagaaggc 180

gacggtgacg gtgtcggacg ggcggatggc caagctcccc ggtctcatcc tgggctgctc 240
 cgtcctggaa gccggccgca gcgtaggacg ccacgacggc gtgctgtcgc tggggaacgg 300
 cgacatgtcc ttgcgcgtcc acgccgcaa gcgcttcggg cagcgcttct ctttctgcct 360
 gctcagcgcc aacagctccc gcgacgctc cagctacctc acct 404

<210> 2574
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-E5

<400> 2574

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 cacaagcatg tctggcatca tcgacaagat ccaggagacg ctccacatcg ggggcgacca 120
 caaggaggag cagcagcaca agaagggcga ggagcaccac aagaagggcg aggagcacca 180
 caagaaggac gacggggagc acaaggaggg catcgtggag aagatcaagg acaagatcac 240
 cggcgagcac ggcgacaagt ccggcgacca caaggacaaa gaccataagg agaagaaaga 300
 taagaagaag aagaaagaga agaagcacgg cgagggccat gaccatggtg atggtgacgg 360
 cggccacagc agcagcagca gcgacagcga ctgatctcgc ctgcgccgagc cccgtgcgca 420
 cat 423

<210> 2575
 <211> 278
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-F10

<400> 2575

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 cagcagcagc agcaagccca cccgttcgac gacatggccc gcctcggagc cggcgccgtg 120
 ggggcactcc tagtggcagt cgccgctgta tccgcgttcc tcgcggtgcc ggccctcggct 180
 aagtccgggg aactgagcac gataggggtg ctggcagcga aaggcagcag aggcaccggc 240
 acgcagaaat gcacgggagc cctgtgctac tgctacgt 278

<210> 2576
 <211> 295
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-F4

 <400> 2576

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 catgcaggtc tttccaaggc gtacgtacta tatcaaatta ttttaatttc cttacatgta 120
 tatgtatgtg ctgctgttgg atacgtacgt atatatatat gttctagggt ttccggttcc 180
 ggccttggtta catgcatgaa gagaagaaac acaatgaata aggcttttat tgattgtggt 240
 tcttctcttc atgcatgtaa cacaatcaat aaaagcctta ttcatttatt atgta 295

<210> 2577
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-F5

 <400> 2577

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 gaaggctcag aggagaagaa ggcgagacgt gcagtcctgc gggcaccgat cgagaacagg 120
 gaagcaagag gctgctagag atcgagctca tcaaccaacc aagtcgtacg tcgtcagcat 180
 cagcaccgga tggcgcgtgc cgcgtccagc tatgtatcca ggagggggct ctccgcagcg 240
 atgacggtgg cggaggagtc cgtgaagaag gtggaggaca aggcggtgaa gctgggaact 300
 gtggccaagg acatcgccag cgccatggcc accacgacgg aggagaagac ggcgttcttg 360
 gaacctgacc ccgagaccgg atactaccgt ccggtcaccg gcacgaagga ggtggacgcc 420
 gccgacctgc gcgccg 436

<210> 2578
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-F6

<400> 2578

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gagccgcagc atggcatcat cgcccgcgct cttggtgcta gccctcgcg tagtggcggc 120

caccgcccc aaggtagcgg aggcaaagaa gaagagagcg gcggagagcg gcgaggcggc 180

ggaggcgaag aagatccagg acgacttctg ctcgacgctg tgcgagggca agaaggggac 240

ggacctggtc gtgtgcaagg agtctcgcg gctctccag cagtccaacc tgggtgctgta 300

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<210> 2579

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-F8

<400> 2579

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gccaggagga gtgcgacaag gcgtacttgg tgaaggcggc cgaggtcaca aaggcctgaa 120

ggttcacttg cgcaaaggag aagaaccgc gcttcagcaa aaattgcaaa aggtcttgca 180

cccctcctcc tctgaagcc aaacccttg aatgaatga accccatgca tgcattgatg 240

catgtatgca tgcgccgggg tgacgtggcg ttcagctcag gcgctgagcg agtctatacg 300

tacgtcgtca ccggtggcc acgcatgca taaccatctg atatggacgg aactatatat 360

tgtattccta ttaatctggc attttctaag ctaattgttt tttttccaaa taatactct 420

catgaactca aaatttaatg tcac 444

<210> 2580

<211> 250

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-G1

<400> 2580

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gttccgctat atctcagcca tcatgggtgc aaatgatgct gaaatgcaca ctgggttccc 120
gactgatcta actcaagtag tacatactgg atgagatcga cctcgatcca cgaacaacac 180
caacactaac aacaccaaga ccactactgg acagacacct aactggatga aagattacca 240
ctcggcacccg 250

<210> 2581
<211> 351
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-050-Q1-E1-G11
<400> 2581

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actacccgac ggtggaactc ctcgcccgcg tcgctgctcc ggtctccgcg ctgctagccg 120
ccgactgtag gggctgtgtg cttctgaaga gagatttcgt tgaacaggat gaatgcattg 180
gcagcaacca gcaggaactt caagcaggca gctaagctgc tgggectcga ctccaagctg 240
gagaagagct tgctcattcc attcaggaggag attaaggttt aatgcacaat cccaaaagat 300
gatggaactt tgggatccta tggttgattt atggttcaac atgataaatg c 351

<210> 2582
<211> 333
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-050-Q1-E1-G12
<400> 2582

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ggaagctgtc gacgaagctg ggctcaatat atatgtctgc tggtcaccat ctcagccaag 120
ggaagccggt ggtcagaacg agctcaatga ggctgctgtc gtcggtgaaa cgacgactga 180
accgaaggag ggctaggatc aagccaagat aataaagcaa gtcgactgcg aaactgcatc 240
aaaagaagtt gctagtactg gggccgattc aatggacgat gccgctacta tggaacgcta 300
gccgctggta tcatcagcat cagcaccaca aga 333

<210> 2583

<211> 377
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-050-Q1-E1-G6

 <400> 2583

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 ctagcggggc ggctgctgca cctggcccc agggtgtcga aggcctgtca ggcaatgagg 120
 atgacgatga tgactccacc aactgaggcc acacatgtcg gcccggttaa atttgaaca 180
 agacatggaa gaaaaatgag agcaatgtct ttaaaacat gaatccataa taatgtgtgg 240
 tcatccatgg atacatcctt gctctccctc ttttctttc tgtttgattt tcaatgtgtt 300
 atcatgttgt tagttaactg tatcnactca tggatatcaag gtctaaaaaa ttatcgtcgt 360
 tcttgtgttc ttgagcc 377

<210> 2584
 <211> 454
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-050-Q1-E1-H1

 <400> 2584

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 ccattgacca acaattaagc ctccccgacc gccacatcta ttaggtgcag ccatgggtgc 120
 ctgtgcaacg aagcctaaga cgcttgaggg gaaagcccca gctgaggcca ccatctccac 180
 acccaagggt gcacctgaga ccactacat ccacattgag gttgcggcaa aacatgcagt 240
 agttgagaag gtggaggagg acaaggagga ggcactaaca gtggcggcga aacaagagcc 300
 agcagccacc attgagcctc agcagattgc tagtgagggt accacttcgg aagtggcggt 360
 cgtcgttgtc gagcctgaga acaaagagga ggaggaagtt gtggagaaga ccgatcatcga 420
 gaaggagaag ccatcagcag tccatgcaga agaa 454

<210> 2585
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-H10

<400> 2585

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agccgccgca accgccacat cagccatggg cgcttgcgca accaagccca agacgcttga 120
ggggcaggcc ccagctgagg ccgccgtcgc cacaccaag gttgcgccc aggccactcc 180
aatctccgtt gaggttgagg ctgatgaaca ggtagctgag aaggtggtgg tggaggagcc 240
ggctgcggcg gccgacgttg agcatcagaa ggctaattgag gtggtcgctc cagatgcggc 300
cgtcgccgag cccgatcaca aggaggagga agccgtggag aagaccgtcg tcgaggagga 360
gaagccagcg gcagccgcca atgcagagga aaaggtcgcc accgccgcc agaccacgac 420
ga 422

<210> 2586

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-H12

<400> 2586

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aagaccgggc tcaagggtcca ggccgtcatg tccttcaacc agttgcggcg gcaacttcgg 120
cgattcagtc accataccac ttccgggatg ggtcttggag gagatggaca aggaccagga 180
cctggcctac accgaccgga gtggccgccg gaactacgag tacgtctccc tgggctgcaa 240
cgcgatgccc gtgctcaagg gccgcacccc catccattgc tacgccgact tcatgcgcgc 300
cttcggcgac aacttcgcca ccttcatggg caacaccatc gtggagatcc aggtcggcat 360
gggccctgcc ggcgagctgc gctaccgctc ctaccggag agcga 405

<210> 2587

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-050-Q1-E1-H6

<400> 2587

catcgcgggc gccaaagtga agctgg

326

<210> 2590

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-A10

<400> 2590

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ataagcccct cctcctcctc gccctggcgt ccgcgctcct tggcgcgccg ccggccgccc 120
cgaacgcgcc cggcgggggc ttcagcaact gggcgccgat gaaccagcag agctacgcgc 180
tgtacgcgca gaagtccgtc ggggacgggg gcaaggagcc cctggacaag aagctgtcgg 240
aggcgggagaa gaacaaagtc acgtacgtgg tggaccccag cggcaaaggg cgactacacc 300
aacatcaccg cggcgctgga ggatatcccg gtgagcatca ccaagcgctg gatcctggat 360
ctcaagcccg gcgctcagtt ccgccagaag ctgttcctga acatcagcaa ccggttcac 420
acgttcggt cggaaccc 438

<210> 2591

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-A11

<400> 2591

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ccacatccac atggcggaacg acgccgtcgc cggcggaagc gccgttcgct gcgcagggcc 120
ggcgccggcc tcgctgtctt ctagcaggaa gcagcagcag cagcccagc acgccggctg 180
cggcagcagc gacgaccact accagcacga cgtgatcatg ctgaggcgga cgaggagcgg 240
gcgggcgttc ccgccgccga tctccgtgat cggcaagggc gggcgccgt ggctctgcct 300
gcgggcgcac cgcgaggggtg gacgcctcgt gctgcggcag atgcgcctgc cgtcgcagga 360
gctgctgcag ccctgcaagg aacggcaagg gaatgatagc tagcgctcct aattgatcag 420
ctgatcagat gatctgccgc c 441

<210> 2592
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-A12

 <400> 2592

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 acctctgct ggtgccaggg ccgggagggc gtcgcgagg tggcgcgcat ggggctcgcc 180
 ggggacgggt cggcggacac cgcccacctc agtaataatg aaaatgggcg gttcatttat 240
 ggagttgcga gttctcctgg taaaagagca tcgatggagg acttctatga ggcaagaata 300
 gacgacgttg atggagagaa aattggaatg ttcggtgtat atgatgggtca tggaggagtc 360
 cgagcagctg agtatgttaa gcagcacctt ttcagcaatt taatcaaaca cccaaagtcc 420
 atcactga 428

<210> 2593
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-A2

 <400> 2593

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 ctgctaataca ctatcagcac atcaagtcaa ccaagcctgt tgtagatcta ctaatatagg 180
 agtgtttctt tgcttaaaat gtggagatgt tcatagggca cttggacctg acatttcaaa 240
 ggttttatct gtaactttgg atgattgggtc tgacagtgat atcgactcca tgggtgaggt 300
 tgggtggaaac tcatatgcaa attcaattta tgaggctttt cttccaaaag atcacccaaa 360
 acccaaacca gattcaacga tggaatatag gacgaaattt ataagagcta agtatgagac 420
 ac 422

<210> 2594
 <211> 390
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-051-Q1-E1-A3

<400> 2594

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ccgcatccag gaccacatca tgaagctggt ggagatggag gggtcncaca ccatgcagaa 180
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ccagaagccc ggcgactacc tgctggtggc gtccaccggg ttcacatcaagg agaagagcag 300
caccacggcc gtgatccgct acaagggtc cagcgccccg ccgccggcca agctgccgga 360
gggccccagc ggggtgggcgt ggtccatcaa 390
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<210> 2595
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-A4

<400> 2595

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ataagaacag agacgtacga taacctgctt attttgcgac acatcccgtt cccacgcaaa 120
ggcgccgagc gtgatctccg tccgtgccgc catggcctcg caccggggcg tgctgctgca 180
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cgccatgccc accatcctga cccccgtggc gcataccccg ctgggggtcct tcgacggcga 300
caagccggcc tctgacgatg acgccgtcga cgacgacgat gacgccgccc ctgtcggcgc 360
gcccacggg gccacatga ctg 383
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<210> 2596
 <211> 381
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-A5

<400> 2596

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gctcgctcgg aatactccgc accaatccgt gtcggaccgg tacgtgtgcg agatctgcgg 180
gcaggggttc cagcgcgacc agaacctgca gatgcaccgg cggcggcaca aggtgccgtg 240
gaagctgctg aagcgggagg cgggggaggc ggcgcggaag cgcgtgttcc tgtgcccgga 300
gccgagctgc ctgcaccacg acccctcgca cgcgtgggc gacctcgtcg gcatcaagaa 360
gcacttccgc cgcaagcaca g 381

<210> 2597

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-A6

<400> 2597

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cggtagaaaa tggccgatgc cgaggatatc cagccccctg tctgcgacaa cggaactggc 120
atggtcaagg ctgggttcgc tggcgacgac gccccgaggg ccgtcttccc cagcatcgtg 180
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gacgaggcgc agtccaagag gggatctctg acctcaagt accccatcga gcacgggatc 300
gtcagcaact gggacgacat ggagaagatc tggcatcaca ccttctacaa cgagctccgc 360
g 361

<210> 2598

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-A7

<400> 2598

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ctccggcgac caccggcctc cctctccgtc ctctagcgac cgaccaacgc gccgagcgaa 120
gatgtcgtgg cagacgtacg tggacgagca cctgatgtgc gagatcgagg gccaccacct 180
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cgagttcaag cccgaggaga tggctgccat catgaaggat ttcgacgagc cggggcacct 300
cgccccgacc ggctgatac tgggaggcac caagtacatg gtcatccaag gcgaacctgg 360
agctgtcatc cgtggcaaga agggatcggg ggcacac 398

<210> 2599
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-A8

<400> 2599
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tgaaaaaagt tgtttgtgaa ttgtaaactg tggaaaaagt tgttgtgggc tgtgagctgt 120
taaaaaacta caaatgttt ggtggaaact actaaaagtc gttaaaagt cttcgatata 180
tgttttcaca gttccatcta aaagcaggta cataggtgct ttgaggtcaa agtggggttga 240
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gggttttacc tcgtccctac gtgaatctca tccaaacact attggaattg tggccgcct 360
attccatccc tccatataca tccaaccaa cattattgtg tc 402

<210> 2600
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-G2

<400> 2600
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tcgattccgg cgacgacctt cgccgtcatc ttatccgtcc tcttctgtgc cgcggctggc 180
accgccgtcg acaacgacct ccccgactac gtcacccagg gccgcgtcta ttgcgacacc 240

5' 3' 3' 5'

tgccgcgccg ggttcgtgac caatgtcacc gagtacatcg cgggcgcca ggtgaggctg 300
gagtgaagc acttcggcac cggcaagctc gagcgctcca tcgacggggt gaccgacggg 360
aacggcacgt acacgatcga gctcaaggac agcc 394

<210> 2601

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-G3

<400> 2601

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tgctgcccgc tgacttctcg gcttggccgg gcgggacacg cccacggcat cgcgatggct 180
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ggcatccacg aggagaggac aagcgcgcgg cgcggtcgag ctgttgaaac gccggcccag 300
gttgattttc tcgtgcgatg gacacgacac ggtgttgacg acgacacggt gttgacgtgg 360
ccggcgccgt tgacgcg 377

<210> 2602

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-H12

<400> 2602

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cccatccagt acatcgattc tcccccaag atcaaaggcc ggaggaggaa gaaaggtag 180
ggagtcggcc atgggatgct tttcatgctg ctgtgtggca gatgacgaca acgttggcag 240
gaggaagaag catgacgatc cctatgttcc tatccctgct catgtttata attttggacc 300
tagccggttc ccagcccaaa cccctgtcat ctccactggc agagctcagc caattgcagt 360
accggccatt catctggaag agctgaagga aattacaaaa aacttcagca gtgatgcct 420

<210> 2603
 <211> 303
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-H3

<400> 2603

atagtgagtc gtattaaatc ttgcgactca cttgtgggat ccagagaaaa ttctacgact 60
 caacattgca acgggtgaag tgctcaagga acatgcaatg cgtcgacgtg caggacaacg 120
 atctcagtcg tgctgcgagt gcacctggac atgctggcaa tgtgtgcagc gttatgacgt 180
 acgacgagct attgatctga catcgacagc atgtcggcaa gtcaagtgca gaacacccca 240
 ggatcagtcg tggatggatc ggggaccgca ccctgtccag catacgacat gacgaccgcg 300
 gtc 303

<210> 2604
 <211> 81
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-H5

<400> 2604

atagtgagtc gtattaaaaa gtacgactca ctataggag tcgtattaag ttgtacgact 60
 caatagtggg actcgtaaga g 81

<210> 2605
 <211> 71
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-035-Q1-E1-H7

<400> 2605

acaacaccct aaagtgagtc gtattaaaaa aaaaaaaaaa aaaaaaaaaa ggaaaaaaaaa 60
 caaaaagata a 71

<210> 2606

<211> 450
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-035-Q1-E1-H8

<400> 2606

gcgtttgtac gttgctacac cctatagtga gtcgtattaa aatcncaggg gggacaggaa 60
 atcagcggcc atggcctcga ttccggcgac gaccttcgcc gtcattcttaa ccgtcctctt 120
 ctgtgccgcg gctggcaccc cgcgcgacaa cgacctcccc gactacgtca tccagggccg 180
 cgtctattgc gacacctgcc gcgcgcgggtt cgtgaccaat gtcaccgagt acatcgccgg 240
 cgccaagggtg aggctggagt gcaagcactt cggcaccggc accgacggga acggcacgta 300
 cacgatcgag ctcaaggaca gccacgagga ggacatctgc caggtgggtct tgggtggagag 360
 cccgcgcaag gactgcgacc angtgcangc ggacagggac cgcgcccgcg tctgtctcac 420
 caggaacgtc ggcatcagcg acaacctgcg 450

<210> 2607
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-A10

<400> 2607

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 gcctccgcgc agcatcgatc atgtcggcct actgcggcaa gtacgcggat gagtcatca 120
 agaatgctgc ctacatcggc acccctggca agggatcctt tgctgctgat gagtcaactg 180
 gcaccattgg caagcgcctt tccagcatca atgtcgagaa cgtggaggag aaccggcggg 240
 ctctccgtga gctcctgttc tgctgccctg gtgccctcca gtacatcagc ggtgtgatcc 300
 tcttcgagga gacctctac cagaagacca aggatggcaa gccttttgtc gatgtcctca 360
 aggaggggaag cgtcctccct ggcatcaagg tcgacaaggg caccattgag gtttttggca 420
 ccgaca 426

<210> 2608
 <211> 407

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-036-Q1-E1-A11

 <400> 2608

 ccctatcgtg agtcgtatta tccatagcat caatcagttc tggctctttcg tggacaataa 60
 tggcgcctct cctaccttcg atgctgctcg tcgggctcgc cgcgggctcc gaggaggagg 120
 aggacggcng cggcaaaaag aagccccacg tcaaccacgg caagtttaag gcggagccgt 180
 ggacggacgg gcacgcgacg tactacggcg ggcgcgacgg gttaactgac accacggaca 240
 gcggcgcgctg cggctacaag ggcgagctgg ggaaagacta cggcacctcg acggcggccg 300
 tgggcccgtc gctgtacacc aacggcaccg ggtgccgcgc gtgctacgag ctcaagggcc 360
 ccaagggcac cgtggtggtg acggccacca acgaagcccc gccgccg 407

<210> 2609
 <211> 222
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-A12

 <400> 2609

ctctatactg agtcgtatta caatcattca ggtccaatac tacatcatag tacctacacg 60
 ctgccgtttc ccccttggca tcagatattg ccatgaggta tacccttact cagcggcaca 120
 tgttacttcg tcgctatacc ggtctcagca gctgctaata taactgtcat gctggctagg 180
 aacctgtggc ttgatctca taatttttct gtcatttatg ag 222

<210> 2610
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-A2

 <400> 2610

ggtcgacgca cgcgtccggt tgaggttgcg gcagatgaac aggtagctga gaagggtggtg 60
 gtggaggagc cggctgcggc ggccgacgtt gagcatcaga aggctaataa ggtggctcgt 120

ccagaggcgg ccgtcgccga gcccgatcac aaggaggagg aagccgtgga gaagaccgtc 180
gtcgaggagg agaagccagc ggcagccgcc aatgcagagg aaaaggtcgc caccgccgcc 240
gagaccacga cgacggtgga ggcgaagaag aaggacgtcg aggaggccag gaaggagaag 300
caggcgcagc aaagctgacc gactgtccgt gcatgcgcgt gccaaactaat ataattattg 360
gctgatgata cctgatgatc agtgtgtgat cgagcaagga gacgacactt gaattctcta 420
c 421

<210> 2611
<211> 408
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-036-Q1-E1-A4

<400> 2611

gggtcgaccc acgcgtccgc ccacgcgtcc gctgaaaaca gccgagcgtat ctctctctcc 60
tctccctctc cgatccattc tccagcgcag cgaagtaaac atgtctgacc gggcaaagat 120
gtcgtggcag gcgtacgtgg acgagcacct gatgtgcgag atcgagggcc accacctcgc 180
ggcggcgggc atcgtcggcc acgacggtgc cgcctgggcg cagagcacgg cgttccccga 240
gttcaagacc gaggacatgg ccaacatcat gaaggacttc gacgagccag ggcacctcgc 300
gccgacaggc ctgttccctc gacctaccaa gtacatggtc atccaaggcg agcctgggtgc 360
cgtcatccgt ggcaagaagg gatcaggang catcacctg aagaagac 408

<210> 2612
<211> 432
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-036-Q1-E1-A8

<400> 2612

ccacgcgtcc gcaagaacca gtgccagcat tcttacaatt gcaagatcct cccgaatagc 60
ttggtgctgg attttgtgac gaacgtccag atccgcggca tcacgctgct caacagcaag 120
ttcttccacc tcaacatctt cgagtgaag aacgtgctga tcgacaaagt tacgggtcaag 180

gcccccgcg acagcccaaa cacggacggc atccacatcg gcgactccag caacgtgacc 240
 atcagcagca ccaccatcgg cgtcggcgac gactgcatct ccatcggccc cgggagcaag 300
 atgatccgca tccatggcgt caagtgcggc ccaggccacg gcatcagcgt cggcagcctg 360
 nggcgctaca aggacgagaa ggacgtggaa gacgtgcagg tgacgggggtg cacgatcgcc 420
 gggcacacga ac 432

<210> 2613
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-B12

<400> 2613

tatagtgcg tcgtactaac gcgtgggcga cccacgcgtc cgtttctaca gcggcataac 60
 gaagctccgc ggcaacgatg acatctccaa gtggaggcag ctgtggccaa cagacgtcct 120
 ggagtaagca tgaaccgcat cccttctcac accgacattg atccatcgct caaatgacac 180
 gcctttcttt catcatcata ttgaccacat tcgtcgtctc tgcgcgctg ttgtaaacgg 240
 gttagtagaa gaacaaatcc cgtagctgga caagggtgta aacttactc tctccgtttc 300
 gttttagttg tcgtcggaca gtgcaaaatt gacctatcca gctacaacta agaagaaacg 360
 gatggagtaa ttgttaggcg tacaaggcgc agactgcttc ccacttgctc gtggggc 417

<210> 2614
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-B4

<400> 2614

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 tgggcgcctc cggcaatgtc aagacagaca gcacgaaggc tgtgcatgac gcatgggcat 120
 cggcgtgcgg cggcactggg aatcagacaa tcctcatacc caaagggtgac ttccttgctc 180
 gacaactcaa cttcacaggc ccttgcaaag gcgacgtgac catccaagtg gatggcaatc 240
 tgctggcgac cacggaccta agccagtaca atgaacatgg taattggatc gagattctac 300

gcctggataa cctggtcac accggcaagg gaaaccttga cgggcacggc ccagccgtgt 360
 ggagcaagaa ctctgcacc aagaagtatg actgcaagat ccttcccaac t 411

<210> 2615
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-B5

<400> 2615

ctcgcggtgc gacccacgcg tctagagaca ctcggtatgat cgtcgacctg gagccccgttc 60
 cggccatcag caagcggcac ggcggcagcg tcggctgcga ccacgcggcg ccgtgcgcca 120
 tggctaggac catgtcgacc agcttcaagg agccaccttg tgtcgccgaa cacctccctc 180
 tctctggccc cgtgcagctc gggcgctcga ccggcttctc ctgggccaag aagccccggc 240
 ccgacgccac gacggccgcg gtaactgtga tgatgcgcga ccggctccat gtggccaggg 300
 accatcaggt acaacatcag cggatgagga gacggagcat gaaccatctc cggctccggc 360
 gccaccacca ccgccacatc agcggcggca tcatacg 397

<210> 2616
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-B8

<400> 2616

cgcggtcga cacacgcgtc caccacgcg tctgtaaaaa tcacatttta aagcagtaaa 60
 ttaattcaaa tgaaaaagtt ttcaactaca aatttgtata actcatcatg atgtacattt 120
 tatattttga atatttcttc atatgataaa ctaaaaataa atttgttcat aaaacctata 180
 tctctctcat agtttatgta actacgagag atatgtataa aatttgtgca tattgttaga 240
 actatcatgt gagatgaata aatgatcaaa caacccaaat aaactttata gatcttgaaa 300
 agttatagaa gtttgtagtt gacaactttt tcatttgaag tcatattgtc aacgaaaact 360
 atgcctgaat ttaaaaaatt taaaatttga attttgaaaa caacctcgaa agaaaaaacc 420
 accaacaatga aagttgt 437

<210> 2617
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-C1

<400> 2617

ggtcgaccca cgcgtctacg gtgagccgct gtacgtcgcg gctgcgcca gctccgcctg 60
gtgccgggac tccgtgggtt tgggcatctg ctctgtctct ggtcgatctg cttcatatac 120
ttctagatct gcgccatctc cgttgctacg accttgaccc caagaagttt gatgaggact 180
tcaatatact aaactgggtg catgaacata agttgtccta tcctattcta tctatcttag 240
ctagagatgt tatttctgtt cctgtctcaa caatttctc agaactctgca tttagccttt 300
gtggcaggat aattgaggaa cgacgacgtc gcctagcacc agaaatggta gagatgttac 360
tttgcatgaa agattgggaa ctaagagaag caagagggca acactctaca ca 412

<210> 2618
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-C11

<400> 2618

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agtccgggct cgatcatccag aactgccgcc tgggtgccga ccagaagctg ttcccggacc 120
gcttcaagat cccctcgtag ctgggcccgc cctggaagga gttctcgcg ctcgtcatca 180
tggagagcac catcgccgac ttcgtcaagc cagaggggta catgccctgg aacggcgact 240
tcgccctcaa gacgtctac tacgccgagt acaacaaccg cgggcccggc gccggcacca 300
gcaagagggt caactggccc ggcttccacg tcatcgacg gaaggaggcc gagccgttca 360
ccgccgggcc gttcatcgac ggcgccatgt ggctcaagta caccggcgcg ccgcacatac 420
ttggtttcaa gttctaaag 439

<210> 2619
<211> 441
<212> DNA

aagggtcatcg acaaggagaa ggtgatgcgc gtcggcatga tcgaccagat caagcgcgag 180
atctccgtca tgcgcctcgt cgcgccccc aacgtcgtgc agctgcacga ggtgatggcc 240
agcaagagca agatatactt cgccatggag tacgtccggg gcggcgagct cttcgccccg 300
gtcgcgccg gccgggtcaa ggaggacgcc gcgagaaggt acttccacca gtcgctcggc 360
gccgtcgact tctgccacag ccgcgggcgtc taccaccgc 399

<210> 2622
<211> 200
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-C7

<400> 2622

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catgagtcag ttagagagcg agcttgtgat ggggagagtt cttttgttgg acggagagtt 120
caaaatccaa aaatcttggg gtatgtacag ttgtctatga ggaataactaa cacgtcttgc 180
agtgccttctg cctctcaaaa 200

<210> 2623
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-C8

<400> 2623

actcgcgggt cgaccacgc gtctaggatg cctcgcacga agtgtccgat cctgcctaac 60
accaacttca cgtacaagtg gcagcccaag gaccagatcg gcagcttctt ctacttccccg 120
tccatcggca tgcagcgggc ggcgggcggc tacggggcca tcagcgtggt cagccgcctc 180
ctcatccccg tcccgttcga ccagcccccg ccggagaacg accacgtggt gctcatcgga 240
gactggtaca ccaaggacca cgaggtgcta gcccgcaga tcgacgccgg caagggcgtg 300
ggccgccccg cgggcgtgct catcaacggc aagggcggca aggacctgga ggccgcgcct 360
gccttcacct tcgaggccgg caagacgtac cgcctccgcg tctgcaaacac cgggatcaag 420
gcgtcgctca acttccgcat ccagggccac tac 453

<210> 2624
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-036-Q1-E1-D1

<400> 2624

 gtcgaccac gcgtccggag acttgggagg caggcgacat ggggtggcggg aaggacgacg 60
 gccacgatcc ctccaaggcg gacaagggat tccacggagg agggatcccg gccgccggtg 120
 gatactacgg cggccattac cccggcggcg gctaccctgc tccaccgggc ggcggtgcgt 180
 accctcccgg gcctgggtac ccggtaccac ctggtgggta cccgcctccg ggtggctacc 240
 ctcagcctgg cggatacccg ccgtcgcaca gggcgtaccc ggccgccgggt gcaggcgcggt 300
 atcctcccag cgggtacccc catcaaccgg tctaccaca gcctggctat ccatcgatgc 360
 ccggtcattg tggcatgtac cgaagaggcc acggtgcang gggctc 406

<210> 2625
 <211> 378
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-D10

<400> 2625

 gtcgatgcac gcctctaaag tgagtcgtat tataagaaaa caaagcaaaa aaaaaaata 60
 aaaaataaaa aaaatcaaaa aaaaacagag acaaacaaaa acagttaaac gcataacaaa 120
 cacataaaac ggggcaagga aaaccacaaa cattgtaaac caaatctaca tcaaaaaagg 180
 gggggccctc ccaaagggtta tcgcgctaga tccccctgct tcacaactta agccctcttc 240
 caagggtcccc ccaatttaca tttccggggg ctttttttaa acaccttgcc cgggaaaacc 300
 ccgggctttt ccaaaattaa tgccttttaa aaaaaccccc ctttctccac ggggtatttt 360
 acgaaaaggg gccccctc 378

<210> 2626
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-D2

<400> 2626

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ggtgccacaa cctctcctgc tgctcgtgct ggtcgccgtg ctacggtggg ccgccgatgt 120
cgccaacgcc ggccacgcca agcccctaac gcctggcggg cgcgtgggtac acgacaacca 180
cggcaagtgc acggccgggc cgtggaaacc cgcccacgca accttctacg gcgggctgga 240
cgggtccggc accacggcgg gcgctgctgg gtacaaggac acgcgcacgc aggggtacgg 300
cgtgcagacg gtggccgtga gcaactgtgt gtctcgtgac ggcgcgccct gcggagggtg 360
ctacgaggtg cgggtcgtgg acagccctag cgggtgcaag cccgacgagg cagcgtctgt 420
ggtgacgggt accgacctgt gcccggc 447

<210> 2627

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-D5

<400> 2627

ccacgcgtcc gccacgcgtc cggggagacc gtctctgacc gcattgacct cgccgtggca 60
cggcctcgag gccggcgacg acgcaggcgc gaggcgccgg aggggtccggc catgacgtcg 120
tccgtgcggc agtgggtggcg ccgcgccgcc gctgcgtctc aggacaggag gagcctgctc 180
ctggcgcgcc tgcgcccgcg ccgggcccgg tcgtcgtcgt ggcaccaccg ggagctggag 240
gcggccgtga tccgcgcgac gagccacgag gaccggtgga tggactaccg gagcgccgcg 300
cgggtgttcg cgtgggcccgc ctcgtcgccc acgttcatcc ggcccgtcat gtgggctgctg 360
gcgcgccgcg cgcggcgagc gcggtgctgg gtcgtggcgc tcaagtcgct catgatcgcg 420
ca 422

<210> 2628

<211> 462

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-D6

<400> 2628

gtccagaact cccgggtcga cccacgcgtc cgcccacgcg tccgtccacc tcaacatctt 60

cgagtgaag aacgtgctga tcgacaaagt tacggtcaag gccccggcg acagcccaa 120

cacggacggc atccacatcg gcgactccag caacgtgacc atcagcagca ccaccatcgg 180

cgtcggcgac gactgcatct ccatcgcccc cgggagcaag atgatccgca tccatggcgt 240

caagtgcggc ccaggccacg gcatcagcgt cggcagcctg gggcgctaca aggacgagaa 300

ggacgtggaa gacgtgcagg tgacggggtg cacgatcgcc ggccaccacga acggcctgcg 360

catcaagtcg tacgaggact ccaagtcgtc gctcaaggcc agcaagttcc tgtacgaggg 420

catcaccatg gacaatgtct cctaccccat catcatcgac ca 462

<210> 2629

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-D8

<400> 2629

ctccccgggtc gaccacgcg tctaggacga gacggacgtc acggacatca acgtcaagga 60

ttgcactctt aagaagacga tgttcggcgt ccgcatcaag gcgtacgagg acgccgcctc 120

cgtgctcacc gtctccaaga tccactacga gaatatcaag atggaggact cagccaaccc 180

catcttcacg gacatgaagt actgccccaa caagttgtgt actgccaacg gcgcctccaa 240

ggtcaccgtc aaggacgtca ccttcaagaa catcaccggc acctcctcca ccccgagggc 300

cgttagcctg ctctgcactg ccaaggtccc atgcaccggc gtcaccatgg atgacgtcaa 360

cgtcgagtat agcggcacca acaacaagac catggctata tgcacgaacg ccaagggcag 420

caccaagggt tgcctca 437

<210> 2630

<211> 411

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-036-Q1-E1-D9

<400> 2630

cacgcgtccg ggcggaggac ccgccgcggt ggcggaaatc tgcataaaaa ctccttcccc 60

caacctgtgc acaggacggc ggggaagcac gccacaagt acaagggtgt ggacgcggtg 120

acggtgctag agatgcangt ggacgcgttc aagaagcgcg tgaaggcggc gcggaggctc 180

gccaaaggagg aggtcaagac ggccgcgacg cccgaagcgc ggagggcgct gaacctctgc 240

aagacctact acctggacgc cgccgacaac ctcggcgcct gcaagcgcgc catcggttc 300

cgcgacgccg tcaccatccg cgccacgatg agcatggtgg cgcaagacac gcagaactgc 360

gacgaagagt tcaagaangc cgtctccaag aaccccatgg aggaccacaa c 411

<210> 2631

<211> 261

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E1

<400> 2631

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catggctgcg cgcattccga tgcgtgggca tgttttttga ttcgacacac cttttgtcct 120

ctttttcttt gttccctott tctccttaat ttaacgaatt gatgcatgcc gctgatgttc 180

ttcccctgag agagggatta acacttgtat catttcatcg cttgccattt gtttgaatcc 240

attcaacaat tcattcaaaa a 261

<210> 2632

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E10

<400> 2632

ccacacccta gagtgagtcg tattagaagg aacagccggc aataagagcc agccagagaa 60

actaataaaa ctgcgacgcg cgccatccga gagaacaagc caaccgaccc cgtccccaag 120

gcaatccgtc gccgacgtac caccgccacc gcaggagcga gatggagatg aagaggatcc 180

tcttcgccgt cctcgtcgtc atcgccgcct cagacaccgc agtgctggcc tccaccgagg 240

ccgccgccgc cggcgcccca actgcctccg agtcgtccgc caaggctccc gctggcacgg 300
gtccccggcg cgccgctggc gccgccaccg cagggcc 337

<210> 2633
<211> 379
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E12

<400> 2633

tatactgagt cgtattagac caacagttaa gcctccccga ccgccacatc tattaggtgc 60
agccatgggt gcctgtgcaa cgaagcctaa gacgcttgag gggaaagccc cagctgagggc 120
caccatctcc acaccaagg ttgcacctga gaccactacc atccacattg aggttgcggc 180
aaaacatgca gtagttgaga aggtggagga ggacaaggag gaggcactaa cagtggcggc 240
gaaacaagag ccagcagcca ccattgagcc tcagcagatt gctagtgagg tgaccacttc 300
ggaagtggcg gtcgtcggtg tcgagcctga gaacaaagag gaggaggaag ttgtggagaa 360
gaccgtcatc caaaaggag 379

<210> 2634
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E4

<400> 2634

cacgggtcga cccacgcgtc cacagagctc ctgactgttc ctctctccct cctcacgggc 60
gggctccgtc tgttccgtcc atccaccgcc ccggtcgtct cccggccaga tccctctcct 120
gcaaggtttc tttgcgagtg gccggagaag atgatgggcg ggttcctctc cagggtcctc 180
ctgctggctt ttggctatgc ctatcctgcc tatgaatgct acaagaccgt tgaactgaac 240
aaaccacaga ttgagcagct catattttgg tgtcagtatt ggattttagt tgccctgttg 300
acagttttgg agagatttgg agattttaca atatcatggc taccgtttta ctcagaagca 360
aagggtgttg tctttgtata tttgtggtac cctaagacaa aggggaactac gtatgtttat 420
ggaactttct ttaagccata tatttct 447

<210> 2635
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E5

<400> 2635

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ccacgcgtcc gctggttcgt ggatggcggc gccacggcct ctcttgctat cgctgctggt   60
cgccgtgcta gcggtggccg cggatgtcgc caacgccggc caccgcaagc ccctgacgcc  120
tggcggggcgc gtggtacacc acaaccacgg caagttcacg gccggggccgt ggaaacccgc  180
ccacgcgacc ttctacggcg ggcgggacgg gtccggcacc acggcggggc cgtagcgggta  240
caaggacacg cgcgcgcagg ggtatggcgt gcagacggtg gccgtgagca cggtagctgtt  300
cggcgacggc gcggcctgcg gcgggtgcta cgaggtgcgc tgcgtggaca gccccagcgg  360
gtgcaagccc agcgcggcgg cgctggtggt gacggcgacc gacctgtgcc cgccaacga  420
acagcaatcc gcggacag                                     438
  
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<210> 2636
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-E8

<400> 2636

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gggtcgaccc aagcgtccag ctacgcacgg ctggagcctg ggcaactgctc atcgtcctcg   60
cggctgccgt cgcggtcctg gccgcgcggc cggcgtctgc aggcggggga gccgcggcgg  120
tggcgggagat ctgcatgaag actccgtccc ccgacctgtg caccaggacg gcggggaagc  180
acgccaacaa gtacaagggtg gtggacgcgg tgacggtgct agagatgcag gtggacgcgt  240
tcaagaagcg cgtgaaggcg gcgcggaggc tcgccaagga ggaggtcaag acggccgcga  300
cgcccagggc gcggagggcg ctgaacctct gcaagaccta ctacctggac gccgccgaca  360
acctcggcgc ctgcaagcgc gccatcggct tccgcgacgc cgttcacatc cgcgccacga  420
tgagcatggt ggcgcaggac acgc                                     444
  
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<210> 2637

<211> 425
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-036-Q1-E1-E9

 <400> 2637

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 acggcaaaac accttcgccg gcgagagcat ggcgatggcg taccgtgtcc tggagggtcac 120
 cctggtgtcg gcaaatagacc tcaagaaagt gtcgctcttc tcccggactc gcatctacgc 180
 cgtggcttcc atctccggat tcgacctccg catcccttcc cacagcacc aagcagacca 240
 cagcaacggc tgcaaccctt gctggaacgc cgtggtacac ttccccatcc cggctgccgc 300
 tgacaccgcg ggcttcgcac tccacgtgag gtcctcgccc cagcgtctat acctgngcga 360
 tcgcgacatc ggcgaggtgt ttgtgcccac cgacgacctc ctggccggcg ccgacaaggg 420
 tggcg 425

<210> 2638
 <211> 295
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-F1

 <400> 2638

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 ctttttcttt gttccctcat tctccttaac ttaacgaatt gatgcatgcc gctgatgttc 180
 ttcccctgag agagggatta acacttgtat catttcatcg cttgccattt gtttgaatcc 240
 attcaacaat tcagtcaaga aaaaagtaaa caaaaagggc ggccgctcta gagga 295

<210> 2639
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-F2

 <400> 2639

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cgatcgaacg agcacaggca cgcacgcacc atggcccgcg ctctcgccct cgcctccttc 120
ctctcgtcg cctccgccac cgtggctttc gccgcggagg ccccggcagc ctcgccgaag 180
cattcggcct ccacgccgtc aaaggcgccc agcagttcgc ccgacaagtc cgagaaggcc 240
cccacggcgt cggctgagaa tgctgcagag acgccgaagg caaccccggc caaggccccg 300
gcggcggcct ccaagtcaga ggcacgcct tccgaggcgc ccgactccgg gtccagcgct 360
gcgtcaccta ctagcgagag cgccgcgtca gagaaggccc ccgccggtgc cccaaggac 420
tcgtcggcca gcccttcgc g 441

<210> 2640
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-036-Q1-E1-G1

<400> 2640

gtcgatacaa caccctacag tgagtcgtgt taaggagacg gagcaagaac cacctccggc 60
tccggcgcca ccgccaccgc cacagcagcg gcggcaccat acgaggcgga gaagcaggag 120
gtgatcaagc agtgggcaca ggctcgtgac gccttcagcg cctctgaagc ttacaacagc 180
aggttgaggc agacgcttga cgccaagcag ctcaagactg gaatgatgca caaggggaag 240
gtgaacaggg tggacttctc agggccgctg ctgtcgcagc cccggcgcat cgacgagctc 300
ctgcacatcc acgagcagca gatccggcaa gctggtcgcc ggccatggtt catgaaaggc 360
accgaggang aggagcactg atggcagaga caggcatgg acacaactaa a 411

<210> 2641
<211> 403
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-G3

<400> 2641

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tactgagcta gccttcagaa aaaaaagaaa agaaagagat tgagaagcag ggagaaaaaa 120
 tggcactggc ccattgagga agcttgagaa ccagttaaca agaattgcca acatattctt 180
 ggacaatctt gttaacagag ttttaaggtt tcccagcaga gaagagcgcg tgcaaccacc 240
 acattcatat aattaataag caagggttag agaagaggca acatgggcac aaagatgaag 300
 aaggggatcc tgaagccgtt ccgctatata tcaaccatca tggatggtaa ggaggctgaa 360
 atgcaaattg ggttccccgac ggatgtaaaa cacgtggcac ata 403

<210> 2642
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-G4

<400> 2642
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 gtcggcccac ctggcgggcgg tgctccaggg cttgctgaag gtgatcgcg gcatcgagat 120
 ctcccttcacg ctgacggcca aggctgctgc ggaggacgac gatgaccctt tcgcgagct 180
 gtacctggtg aagtggacgt cgctcttcat cccaccgttg gcagtgatcg gtatcaacat 240
 cattgcgctc gtagtcggtg tgtcccgcgc cgtgtacgcg gagatcccg agtacagcaa 300
 gcttctgggc ggcggggttct tcagcttctg ggtgctggcg cactactacc cgttcgccaa 360
 ggggctcatg ggtcgccgcg gacgcacgcc gaccctcgtc tacgtctggg cgggacttat 420
 ctccatcacc gtctccctgc tttggatcac atc 453

<210> 2643
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-G5

<400> 2643
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 gaaggcagcc gtggccgctc tgctggtgtt cgccgcggtg tcgctgccg cgcgcgcggt 120
 ggcggcggag gcggaggcga aggcgaaggc tgtgggaggc gcgccgtcgg tgcccgtggt 180

ctcgcctggac atcgcgcagc tgggcgcgcaa gggcgacggc aagtcggaca gcaccccgat 240
 ggtgctcaag gcgtggaagc acgcgtgcga ggcgacggg cagcagaaga tcgtcatccc 300
 caagggcaac tacctgacgg gcgcgctgga cctggtgggc ccctgcaagt cctccatcat 360
 catccgcctc gacggcaacc tgctcggcac cggcgacctc aacgcgtaca agaggaactg 420
 g 421

<210> 2644
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-G6

<400> 2644

actcgcggt cgacccaagc gtctacgcag catcgcgaca ggaccacacc gcccgctctga 60
 ccgacgcaac ccagccgtcc agacgcgccg ccgaccgtcc ttccaccacc acgcccgcgc 120
 cgtcgcacgc tccctagggc tccgcagggc cggggatcgc cggagatgga ctggagcgcg 180
 gtgacggcgg aggacttggc ggacgcgctg cgggaggtgg actggtccat gccgccgcgg 240
 cctgtcccgg agttcttctc ccgcttcacc gtcccacgct cctactccaa gtggaccagc 300
 cgcctcaagt gcaacctcta ctactacagg acaaactatt tcattcttgat catgttcac 360
 cttgggatgg gcttcctttg gaagccagtt gctatagttg ctgcttttat gactggactt 420
 agcatcgcac ttctcaatga tagt 444

<210> 2645
 <211> 216
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-G7

<400> 2645

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 tatttgctac cactacccta ttacgacagt gatgctggcg ccaacaatga tgggtgcatc 120
 ctcttctcc atcttcttca tctccatata tagctagagt gagacttcgc tggtgtttaa 180
 aagagaagag ttaagaaatg gattgacaag ttatat 216

<210> 2646
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-G8

 <400> 2646

 actcgtagga cgttacaata ccctatagtg agtcgtatta tgacgtccgc ccacgcgtcc 60
 ggccccggcca ccaaaaccaa tcagcgtcac aaagccgggg ggcgatagct caagcgccgc 120
 tagcgagttg cgcaccggga gccgtcggcg gtataccgct ctctgtgccg gatcaacaaa 180
 gccacaggtc cgattatctc ctttcgtgac ttagccaacg ttgcgccgga tagatcagta 240
 ctgctaatacg ctaacaacac atcaactcaa ctaagcctgt tgtacgcacg gcaagaaaat 300
 tgacggatct catcatagac agtgacagta ggatatgtgc tgactgtggt gcacctgac 360
 ccaaatgggc atctggtaat attggagtgt ttctttgctt aaaatgtgga gatgttcata 420
 gggcaattgg acctgacag 439

<210> 2647
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-036-Q1-E1-H1

 <400> 2647

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 tttctctccc ggacgtcgat cgtgttcttc agcacgggct agctagctcc ctccctccca 120
 gccatggcga cgccggacaa caaggggcac gggcatccgc tgcccaagtt tggggagtgg 180
 gacgtgaaga atccggccac gtccgagggc ttcaccgtca tattccagaa ggccccgcgac 240
 gacaagaaga ccaccaccgg ccttggggct gggaacgcgc gcgcaggcat tccgccggcc 300
 ttcaggaacg gcggcggcga cggggggtac agggccgact tcggcgacgg caaccagtac 360
 acgccgcca aacggaagaa gtgggccttc tg 392

<210> 2648
 <211> 391
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-H10

<400> 2648

ctatagtga tctgtattatg cgtccgcca cgcgtccgga gggagccaag gaaagctctc 60

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ggcttccccg gttcttgaga ggggaaatag gaggcggagc cgaggagagg gatggggagg 180

gacgagaggt tcccagtgtg ggaggccgcg ctcggcgctg gggtcgccgc cgccttcgcc 240

gctgggctcg tcggcgtgta cctttccatg ccggactccg actacagctt cctcaagctg 300

ccacgtaatc tccaggaact ccaaactctc actggccatc gtgagaacta tactagcgac 360

tacaccctac aggtgtttgt atgctactgc g 391

<210> 2649

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-H5

<400> 2649

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agtcgtctaa ttcttgatc gaattagacg acttcttcgt ccctctcttc attagcacgc 120

taacttgtaa tctgcaggat ctaagcaaag acttgattta gttatggacg gattggtagg 180

cctcttgaaa gttcgcgtgg tccggggtat caaccttgcc taccgcgacg caagaggcag 240

cgatccgtat gtcgtcttac ggcttgga gaagaaactg aagacaagcg tgaagaagag 300

atccgtgaac cccatatggc aagaggagct aactctgacc gtcacagatc ccagccaacc 360

actgaagctg gtgagtgagc 380

<210> 2650

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-H6

<400> 2650

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acagccttcc agctcgcgtt cggctccctg ctcatcttcc tcatgtgggc caccaggctc 120
caccgcggcg ccaggctctc cgctgcgcag ctgggcaaga tcgcgccgct ggccgtgggg 180
cacatgctgg gcacgggtgtt caccaacatg agcctgggca aggtcgccgt ctcttcacg 240
cacaccatca aggcctccga gcccttcttc accgtcgtcc tctccgccct ctctctcggc 300
gaggttcctt cccttcgggt gctgggctcg ctcggtccga tcgttgggcg cgtcgccctg 360
gcgtcattca ccgaagtttc tttcaactgg accgggtttt ggagcgccat ggcgtccaat 420
cctgacaacc aat 433

<210> 2651
<211> 310
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-042-Q1-E1-G1
<400> 2651

cgggtccagaa taccggggtc gaccacgcg tccgctagtg taacgggtaa ggcttccgag 60
tagcacctca aggtcctagg ttcgatcccc tcgggggcga atttctggct tggtaaataa 120
aaattcctcg ttgtgtcctg tccggcatcc gtcctcgggt tacgtcctgc gtgcaccctt 180
cgggtgggct gtttgagagt tagcggttac ggccagggtt cggggatttt ctgcaccggg 240
atcatgtttc ggtctcttct taatataata tcgagagggc ggtctttccc tcccctgtcg 300
agttttctgt 310

<210> 2652
<211> 221
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-042-Q1-E1-G11
<400> 2652

cgcgggtcca cccacgcgtc cgaacctcgc ctctccatt gaccaacaat taagcctccc 60
cgaccgccac atctattagg tgcagccatg ggtgcctgtg caacgaagcc taagacgctt 120
gaggggaaag cccagctga ggccaccatc tccacacca aggttgcacc tgagaccact 180

accatccaca ttgaggttgc ggcaaaacat gcagtagttg g

221

<210> 2653

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-G2

<400> 2653

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gactaataag cccctcctcc tctcgcctt ggcggtccgcg ctcttgggtg cggcgccggc 120

cgccgcgaac gcgcccggcg gggcggttcag caactgggtg gcgatgaacc agcagagcta 180

cgcgctgtac gcgcagaagt ccgtcgggga cgggggcaag gagccccctg acaagaagct 240

gtcggaggcg gagaagaaga acgtcacgta cgtgggtggac cccatcggca agggcgacta 300

caccatcatc accgcggcgc tgcaggatct cgcggtgagc aacaccaatc gcgtgatact 360

ggatctcaag cccggagctc acttgcgcca gaaactgatc ctgaagatca agaca 415

<210> 2654

<211> 345

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-042-Q1-E1-G3

<400> 2654

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caagattcag gacaaggang gcaatcccc aagaccagca gcgggtcaat ccttgccgga 180

aaacaacttg aagaacggcg caagccttcc gactacaaca tccaaaagga gaacaacctc 240

cacttgggtg tgcgcctcaa gggaagcatg cagatcttcg ctaagaccct gaccggcaaa 300

actatcacc tccaagtgga gtcttcaaac accatcgaca atgtc 345

<210> 2655

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-042-Q1-E1-G5

<400> 2655

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tacgcatcac caactcgacc attggcaccg gcgacgactg cgtctccatc ggccccggga 180
gcgacggtgt catggtgaac aacatcacct gtggccccgg gcagggcatc agtgtgggct 240
gcctaggccg ctacaaggat gagaaggacg tgagcgacgt gacggtgcgg gattgcgtgc 300
ttaggaacac caccaacggc gtgcgcatca agtcgtacga ggatgccgag tctgtgtca 360
cggcgtcnca tctcaccttc gagaacatca ggatgganga ggtggccaan cccatcatca 420
tcg 423

<210> 2656
<211> 284
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-G8

<400> 2656

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acgacgatcg atatgtaata gcacgtcgtc gacgaccgac cgcagtcgtc gcagactggc 120
tggcactaaa ccacaaatcc tcttcacctg gattacaaat atgtaactga gaaaggaaag 180
gaaaacaaaa atgtaactgc gtgacaatag caagaatcca gcactcagaa tttggtacag 240
ccacgcagtt acaaattctg agtgctggat tcttgctatt gtca 284

<210> 2657
<211> 219
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-G9

<400> 2657

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aagcgagtac ggcgccgact ccggggacgc ggcgaccag cggcagcaac atcgctgacc 240
 tcctcgccg agatgcgtgt gtggtgtaca atatttatac caaggggtcg atgtcgactg 300
 tcggatacta tcagagatac ccaaccctcg atcgtagacag ctttagtaca tgtaatgatg 360
 ctcataaaat gtcatgtaac gtacgtatatt gtgtgtgaca tggtgctgct tgcttgact 419

<210> 2661

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-H5

<400> 2661

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 gtgatttgtg ctcaccaatg atagttctac taaacgatga agcagatgca ttttggtgct 120
 ttgagaaaatt gatgcgtaga ttgcgaggaa atttcagatg cacagatcaa tctgtgggag 180
 ttgccaaacca acttcaacac cttgcgtcta ttattcaggt tcttgaccg aagctacatg 240
 accacctaga aactcttggt ggaggtgact acctttttgc gttccgtatg ttcattggtgc 300
 tttttaggcg tgaagtatca tttggagact ctttatacct ctgggagatg atgtgggctc 360
 tggaatacga ccctgacatt ttcttcgcag cgtgtgaaga acaaggtgca gtaaat 416

<210> 2662

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-H6

<400> 2662

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 ggagctcaca aagctacgcg tgctcaacct cagctacaac aggatttcgc ggattgggca 180
 tggctctgtcg aactgcacgg ccatccggga gctgtacctg gcgggcaaca agatcagcga 240
 cgtggaggggt ctgcaccggc tgctgaagct ggcggtgctg gacctgagct tcaacaagat 300
 tacgacggcc aaggcgctgg ggcagctggt ggccaactac cactccctcc tggcgctcaa 360

cctcgttggc aaccgggtgc aggccaacat cggcgacgac gccctgcgcc gggcggtcac 420
gggcctcctc ccg 433

<210> 2663
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-042-Q1-E1-H7

<400> 2663

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cacaataatg gcccgcgct gcggtgttct cgtggtgctc ctcttgccg ccgtcgcggt 120
ggcgccgttt gcgggggctg cgcgcgtgga tgtcgtggag ggcaggcca tggcgtccgc 180
cgacgcgcct gagggggcgg ctgacgcgcc cgctcccgt cccgactccg cctcatcccc 240
ggactcgtcg tcggaggcgc cctccagcag cagctcatcc gactagccgc gcacaacgca 300
gttcttgtca tgatctatct agcaaataaa aagatcatat gtctcgtttg attctctgga 360
ataactaata gtatatatgc tgcgcccga tgatatataa atatgtgcat gaaa 414

<210> 2664
<211> 403
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-043-Q1-E1-A1

<400> 2664

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gtcgctcca gcgcaacggt gtcgactgct catgacgaga gctgctggaa ggacgacgac 180
caccacccta tctgttttcc cgaagactgc gtggcgacct gccaggatca cgccacgcg 240
gacggccgct gcaactgggc atggtcgtgg aggccgtatt gccagtgcct gttggcggac 300
tgccaatagg cgcgaacagc tgcgtcgcgt ggcgtcctgg ctgcctcgcc ggccgatgaa 360
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<210> 2665
 <211> 396
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-043-Q1-E1-A10

<400> 2665

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cgggtcgagc cacgcgtccg acgtcaacct cgccgtcgcc gtcgccgccg cgccattagc 60
agcctacgct gccgccacgc gccatcaagc catcgcccgt gctcaagtcc agcgtgtgag 120
actagtagaa cgctgcgatg gcagcgtagg gaatcacggt tcaattccac aacgtcaatc 180
gccaccggga gganagccan gaccgcccac gcgctccgcg tgcagccgca ctagctgctg 240
tcacgcacg actacgtatc gctcgcgatg cgcgcggtta cacgtcaacg ggaaaggcaa 300
gaggtccttc atgtccagca tctacatgtg cctgttccca aaggtcatcg actgagtgat 360
ccgaagatgg atattcacia tcgctcaccg gtatac 396
  
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<210> 2666
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-A11

<400> 2666

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gagcggccgt ccggtccgac aggggtccacc accaccaccg ccggtccgag gcgtcgtgtc 120
cggcaacctc cgcggccgtg gcggcgccga gggccgatga cgccctgcgc cagcgccccg 180
gggggctcgt gcaggtccgg gagcgggacc agggcccgtc gtcgacgggg caccagcacc 240
tgcaccacca tcaccaccag ctgcggcggt cgcgggcggt cccaccccgc cgcccggggc 300
cggggcgccg ccctcctcag cgctgcgaaa gcgacctcaa catcagggag caccgctcct 360
gcagcgaggt ggccggcggc accgcggcgg gctgcgccgc tgtgtgctgc tgc 413
  
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<210> 2667
 <211> 426
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-043-Q1-E1-A12

<400> 2667

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gctaataaca tcatgggtcgt gggcgccgtc cttgcagcac ttgtcgtccg cgggtcgtgc 120
tggtccccga acgtgccgcc cggtcccaac atcaccacca actacaacgg caaatggctc 180
accgccagcg ccacctggta cggtcagccc aacagtgccg gcgctcctga caacagcggc 240
gcgtgcggga tcaagaacgt gaacctgcc aacctacagcg gcatgacggc gtgcggcaac 300
gtccccatct tcaacgacgg caagggctgt ggctcatgct acgatgtgag atgcaaggaa 360
aaacctgaat gtcggggcaa tccagtcacn gtgttcatca cagacatgaa ctacgagcct 420
atcgct 426

<210> 2668
<211> 290
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-A5

<400> 2668

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ccatggcggt cctgtggctc gagttctcgc agtcgttcca ggtgctggca atcctcgcgt 120
ccaagctcaa gcacgccgtc gcgctcggct acaagtcttg ggtcggcgcg gggctccccg 180
ccaagggagc cgccacgctc gcgctcgct gccagctggg cctcctccgg tgcaaactcg 240
cctgccaagt cggggctctg ttgatgcaac ttggggccgt ccgggggggg 290

<210> 2669
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-A7

<400> 2669

gggtcgaccc acgcgtccgc ggacgcgtgg gcggacgcgt gggcgctccc aatggggcta 60
tcgttaccat ttcaacatac acgaccattt tctacacaca actttgagtg aagatttatc 120

ggacacaggt ggtaatcgtc tgacatgtcc tgagatacac ggagactgat ggtgccaggc 180
tagtgggttg agtacaggat gagcgcaacc ggtagtgtgt atatcacgtt ctttgtactc 240
aagaattttg tacagacaga atgcggtgcg gatagcatgc cttgcataca taataatttc 300
aatacagggt gaaaacttga aatcaaaac 329

<210> 2670
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-A8

<400> 2670

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gtcctcttct gcatcgtgca tgggtgagaag gaagagtcaa agggcatcga tgcgaaagcg 120
tccgggcctg gtgggtcctt cgacatcacc aagttgggcg cctccggcaa tggcaagaca 180
tacagcacga aggctgtgca cgaggcatgg gcatcggcgt gcggcggcac tgggaagcat 240
acaatcctca taccgaagg cgacttcctt gtcggacaac tcaacttcac atgcccttgc 300
aatggcgacg tgaccatcca ggtggatggc aatctgctgg cgaccacgga cctaagccag 360
tacaaggacc atggtaattg gatcgagatt ctacgcgtgg ataacctggt catcaccggc 420
aagggaac 429

<210> 2671
<211> 310
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B10

<400> 2671

gggtcgacgc acgcgtccgc acacgacgtc cgatgatacc tgatgatcag tgtgtgatcg 60
agcaaggaga cgacacttga attctctaca gttggcatag cggcataggt cgggagagac 120
actctcgact ggccacacca tgtaacaaac taaccttctt cgatgtctcc cattattttc 180
ctccacggag ttcttctgat gaaacaacat gttctaattg ggaaaaaaaa aaaaaaaaaa 240
aaaaagaaag aaacacaaaa agaaacaaaa ctaaagtga agtaaataa aagggataaa 300

atcttacgat

310

<210> 2672

<211> 326

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B11

<400> 2672

cggggtcgacg cagcggtccg aaaacaacca cgctccatc acatcactgc cgccgcggtc 60
gctacagtcg ctgataagcc gctgcatcca cggatggaga tgaacaggat ccccccacaca 120
gtctcctcct gcctctgcac attcacttac acctctgcgc tagcgcaatc tctgaccaga 180
tgatcggtccg ccgtcttaca cgccatcgcc ggggaaaacg ttggcggttat cctcgcggaag 240
cacattcact taaccccccg attaagaacc ggagccagaa ggaagaaagc caggtccggt 300
gacacatctc actactctgc gctgct 326

<210> 2673

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B12

<400> 2673

gggtcgacgc acgcggtccga acacggtcc ggagcaagaa ctctgcacc aagaagtacg 60
actgcaagat ccttcccaac tcgctggtga tggacttcgt gaacaacggg gaggtgtccg 120
gggtcacgct gctcaactcc aagttcttcc acatgaacat gtaccggtgc aaggacatgc 180
tgatcaagga cgtgaccgtg acggcgcccc gggacagccc caacacggat ggcattccaca 240
tgggcgactc atccgggatc acgatcacca acaccgtcat tggcgtcggt gacgactgca 300
tctccatcgg ccccgggacc tccaaggtga acatcaccgg cgtgacctgc ggccctggcc 360
acggcatcag cat 373

<210> 2674

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B2

<400> 2674

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cgccagcaac aaggtctccg atgaagcggc ggaggctacc gcggtgccgc ctgcaggtgc 120
cagtgccaaag acctcgagca gcaacgatgc ccgcgacggc gccatgggca gcgtgcagga 180
cgagccgchg gagcagcgcc acgatgacta tcaccccgag atcgtcccg agaagatcat 240
acacgatgac gcgttgccgg tcgttgctgc acagaaggag accgccgccc ccgccgacgt 300
ctcgaatgag gacgacgtgg agtcgccccaa gaaaagagcg gctctgtcgc cggtgccgga 360
gactatcgtc atcgtcaccg acgcaacctc gaacgaggaa gacg 404

<210> 2675

<211> 387

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-043-Q1-E1-B3

<400> 2675

ggtcgaccca cgcgtccgat cgctggccca taaatatata tctatctatc gccatcgagc 60
aattataatc tcacagaata ataaacatca tggggcaagc ctcacggctc gtcctcctcg 120
ccgtcgtggc gctgctgtcc gccggcctcc tcccgcaggc gctgggtaag ggtaggggag 180
gcaggggaca cgggtggcgcc gtcaaccgc aggtcgccgg catctgtctc cgcaccccg 240
tcccggaggt gtgcacgtcc accgccgggc ggcacgcgtc caagtacccg gtcacgaca 300
acctggccgt gctgaacatg caggtggacg cgttcgccaa gcgcaacgcg caggcgcgca 360
agcacgtcgc gaggtcnggc ccgcaca 387

<210> 2676

<211> 412

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-043-Q1-E1-B4

<400> 2676

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atccacatcg gcgactccag caacgtgacc atcagcagca ccaccatcgg cgtcggcgac 120
gactgcatct ccatcgggcc cgaggagcaag atgatccgca tccatggcgt caagtgcggc 180
ccaggccacg gcatcagcgt cggcagcctg gggcgctaca aggacgagaa ggacgtggaa 240
gacgtgcagg tgacgggggtg cagcatcgcc ggcaccacga acggcctgcg catcaagtcg 300
tacgaggact ccaagtcgtc gctcaaggcc agcaagttcc tgtacgangg catcaccatg 360
gacaatgtct cctaccccat catcatcgac cagaagtact gcccacaaca ca 412

<210> 2677
<211> 298
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B5

<400> 2677

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taaaaaaaaa aaataaaaaa aaaaaaaaaa aaaaaaaggc aatcaaaaaca aaaaagttaa 120
caacataaat atggggggggc tcctctagag gttccaccct tacgttaagt tacaggtaat 180
ttaataggcc tacaatgtag ccccttatat ccacttcacg ggaggacctt ttcaaccatc 240
ccgtctggaa aaacgtggcc gttaccatcc ttatcgact cgtcaaaatt cccgtttt 298

<210> 2678
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B6

<400> 2678

ccacgcgtcc gaataatctc gaccaatggc ggcaccaacg gtggtgctca tcccgttctg 60
cgtcaccggc cacctgacgt ccatgctcca agccggcaag cggatgctga tgagcggcgg 120
cggcgacctg gccatgtcgc tcaccgtgct cctcgcgcca ctgccgatgg ccaggttcgc 180
gcacatcgta gagcgggagg ccacctcggg ctcggggttc gacatccgct tccaccgcct 240
ccctgacgtg gagctccccg ctttctccgg cccggaggac atgatctcca gtttcatcca 300

gctgcaggcg tccaacacca aggcgggcat tgccggcctg gcaagccccg tcgccgccgt 360
 cgtcattggac tactttttgc acacgctgtt cgacgtcgcc cgcgagttgg cactgccgggt 420
 gtacgtgta 429

<210> 2679
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B7

<400> 2679

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 ctccaatgcg gtagtgatgg actgcagtgt atacaggaga taagcggcca tctagcagag 120
 ttgcgaagag ttgtgactcg ctaaggaaaa tggttttgcc ccgagtccaa attgttaggt 180
 catcatgagg tcttctcatg cagcagacta acgaggggtgc ttccactgag tgcccacaat 240
 cccatctatc tgaagatgga tgccgttgca ggaaataccg atgctcttcg cttctgatcg 300
 ggctcaacag cagacaaaaa ttttccatct tttgcacttt gagttcctca tcgacatttg 360
 cagactactg aagcagatgg gactctaaaa gaaag 395

<210> 2680
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-B8

<400> 2680

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 agttggcgcc ggtcgtggag gagctgattt cgccgatgaa cagcctggac gacggctgcc 120
 tcatgcacat cttcagcttc ctgagcccaa tcccagatgg cgcttccttg catgccaccc 180
 tcggctatgg ctgcgtgttg agaggccaat cagagatgag atggagcctg gagtttatcc 240
 tgatctcgag gctgctgttt ctgctgctag gccgggtgac accattctta ttgcggctgg 300
 tggttcccat gttgcatgta acatccaaat aaagaagcct atttgcataa ttggcggggg 360
 cgatcttctt gatgacactg tattgacctg ctcacgtggc ttcgacaacg cactggagtt 420

tctatcaaca tgcaagattg caaatctga

449

<210> 2681

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-C1

<400> 2681

gtagccgtcc taaattctag ggtagacca cgcgtccgat cggattggaa ctcgatcgga 60

aggaagggtcc tgcaggccgg ctggccggtc gtcgatcgag gaaccaagct gctgctgctg 120

ctaccggacg acaccaacca tgatacggag gacgacggcg tgcctaggcc tgctgcttct 180

actactggcg gcgtcgactg cgacggcaca tttctcgatc ggcgacgtgg acgagtactt 240

gaacaggcgc acgcaggagt cccgccacag gaaccacggc ggcgcgaga tcaatgacct 300

catctccagt gctgcgcgt tccacgcaa cgtggatgca cgcgcgtatg gtcgccgctc 360

<210> 2682

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-C10

<400> 2682

gggtcgaccc acgcgtccga cacaacccg gaccgaccac gccatggcgc tgtggatttc 60

gatcttcggt gagggtgcc caagctcctt tccatcggtg ctgcccgcga ctgctgccac 120

cgagatcctg tcggcaccgc cctccgcgcg ctcccgtgc cgcacgggac caacctgttc 180

gcctgttcat ccaactcagc acattcacgc ccgcatctcg ccgtgggcag caccgcactc 240

accaccgccg tcgcagtgc gtcacgagtc agctgaagag caagttggtta cctggaatct 300

caagtcccag gtcaagaaca ggtaccgcag gatgaggcgc atggaggatg ctgtggcgag 360

ttcgtgagag gtctaggcca tcgtctccca gtcaactttg gggtgctgga ccgttgcttc 420

cttataatga aa 432

<210> 2683

<211> 398

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-043-Q1-E1-C11

 <400> 2683

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 ccttcccttc atcatggggc aaccggaact cccttggtct ccaagaaaac cttccccggc 120
 gggttgccaa cggtctgttt cctcgtcttc aggggtgtcg cgctctccat cacggcggtc 180
 ccggtgctgg cacgcattct cgccgagctc aagctgctca ccaccgacct cgggcgcatg 240
 gccatgtcag ctgccgccgt gaacgacgtc gttgcgtgga tacttctggc cctggccatc 300
 gctttgtcag gcaccgggtc ccctcctgtc cccttatggg gtgctgctan cgggaactgg 360
 ctttgtcctc ccggcggttc tgttgctccg cccgggcc 398

<210> 2684
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-043-Q1-E1-C12

 <400> 2684

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 aagttgtgta ctgccaacgg cgctcttaag gtcaccatca aggatgtcac cttcaagaac 120
 atcaccagca cctcctcaac cccggaggcc gttaccctgc tctgcactgc caaggtccca 180
 tgcaccggct tcaccatgga tgacgtcaac gtcgagtata gcggcactaa caacaagacc 240
 atggctatat gcacgaacgc caacggcagc accaacgggt gcctcaagga gcttgcattg 300
 ttctagaccc tccatctact gacctatctc tctaattata atttttctct cgtccttgca 360
 ttgcccatta gatgctatcc attggtaacg cacaacagta aaacgacaca catccgctcag 420
 ct 422

<210> 2685
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-C2

<400> 2685

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gtaatctgca ggatctaagc aaagacttga tttagttatg gacggattgg taggcctctt 120
gaaagttcgc gtgggtccggg gtatcaacct tgcctaccgc gacgcaagag gcagcgatcc 180
gtatgtcgtc ctacggcttg gcaagaagaa actgaagaca agcgtgaaga agagatccgt 240
gaaccccata tggcaagagg agctaactct gaacgtcaca gattccagcc aaccactgaa 300
gctggaagtg ttcgacaagg acaccttcaa caaagacgac cccatgggag acgcgagggt 360
ggacgtggcg ccaactgatgg aggcgggtgag catgaacccg 400

<210> 2686

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-C3

<400> 2686

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gcgggtcactg tgggaacttg ctgaagtga gtagagccg ctgtggatca aaggcggaaa 120
ccactgcaac ctagaactgt acccggaata catcaaakat ctgaagaagt tcgttggagc 180
catagagaaa tcgccacccc cacctccgat cgacgagtgc atggagagct caagcccgtc 240
ggattgtacc ccagcagaac ccgagtgtac agcggactca aggaagagca cggactgcag 300
ggacaaagca aggccaagca tagatcagag acaaagcacg gaccggcggg acaag 355

<210> 2687

<211> 170

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-C5

<400> 2687

actaaagtga gtcgtattaa gttgttgact gttcgcattg tcggtcatcg tgggtagatg 60
aagcaatctg ctactactgg cagtggatca caggaggcat gcaatggggg ataggggtgt 120

accaggcca gatcattcat cttaaaggggt tctttgtgct catagaaaat

170

<210> 2688

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-C6

<400> 2688

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agtgaatata atacaatggg gtagctgata tatgtacagg aaggcttctt gtagcagata 120

caaacaacaa cgcaatcaga tatataactc ttagtgacaa aggtgctgag gtgaagacac 180

tagagttgat cggagtacaa cggccatcac caaaaccgaa ggtgttgaaa cgcctaagac 240

ggcagttatc ggcagataca gatgttatta atgtcgatgg tggttcttca aaggaaggat 300

tcttgtctct tgcagttaca gtacctgatg gttaccattt ctccaagggtc atcaataacc 360

ataagacatt gttttttctt atcttacttg caagtttgca ttattcatgg tagtcactaa 420

tgactg 426

<210> 2689

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-C7

<400> 2689

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gccgtccgac ccggccaaag cggcgctgct caagaccttc caggacgccg gtgtgacgct 180

cctcaagggc gacctgtacg accaggctag cctggtgagc gcggtgaagg gcgcggacgt 240

ggtcattctcc gtgctcggat cgatgcagat cgccgaccag agccggctcg tcgacgccat 300

caaggaggcc ggcaacgtca agaggttctt cccgtcggag ttcggcctgg acgtggaccg 360

cacgggcatc gtggagccgg ccaagtccat ctaggcgcc aaggtgggca tccgccgcgc 420

caccgaggcc gcgggcatac cct 443

CCAGGAGGCA GATCATT CATCTAAAGGGGT TCTTTGTGCT CATAGAAAAT

<210> 2690
 <211> 286
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-043-Q1-E1-C8

 <400> 2690

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 atttattctc caaatacca ccaaattcag gggttacctc ttgtctctct ctctctcttt 120
 tccttttgat taaaagtaag tgaattaggc gaggggtttaa ttatttattt tgtcaaaaact 180
 tatgtgagtc atgaaatggt gcatcatgct gagcctaaat tattcttttg ttgatgcac 240
 atgtttgaat tggtttgaat ttgaaatttg gtttgagttt gatttg 286

<210> 2691
 <211> 228
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-043-Q1-E1-C9

 <400> 2691

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 caacggttta cgttttggaa acggaatttc ttcgggaacc aaattaagct tggccttacg 120
 aaccttggcc ctattgggcg tgctctgctg caacatggca accaccggtt ccgccaacaa 180
 gaaaggaatc aaggtcttcg gaagcttcga gggttcagaa tacggaag 228

<210> 2692
 <211> 367
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-043-Q1-E1-D1

 <400> 2692

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 acgtgcagaa caagaactcc tcctacttcg tggagtggat ccctaacaac gtcaagtcca 120
 gcgtgtgcga catcccaccc gtcgggctgt ccatgtcctc caccttcgtg ggcaactcca 180

cctccatcca ggagatgttc cgccgctga gcgagcagtt cacggctatg ttccggcgca 240
 aggcttctt gcattggtac accagcgagg gcatggacga gatggagttc accgaagccg 300
 agagcaacat gaacgacctc gtcgcccaggt accagcagta ccaagacgcc acagccgagg 360
 agtacga 367

<210> 2693
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-D11

<400> 2693

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 gacgtcgtct tcaagaacat ccacggcacc tccaacacgc cggaggccat cacgtcaac 120
 tgcgccaaca acctgccctg ccagggcggtg cagctcatca acgtcgacat caagtacaac 180
 aggtccgaca acaagaccat gtccgtctgc aagaacgcca tcggcaagtc cattggcatg 240
 gcgaaggagc tcgcttgcgt ctgaacctac ttgcatccat cactcactct tcgtcacctc 300
 tctctttctc actctcgcca gtcttttttt aggcctctgg caatctcgga actttcttat 360
 tcattctact agtgtggatc tataattcca ttcaaaat 398

<210> 2694
 <211> 416
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-043-Q1-E1-D2

<400> 2694

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 ctacacaaat aagggtccgc ccttttccga cattcacagg ggggacagga aatcagcggc 120
 catggcctcg attccggcga cgaccttcgc cgtcatctta tccgtcctct tctgtgccgc 180
 ggctggcacc gccgtcgaca acgacctccc cgactacgtc atccagggcc gcgtctattg 240
 cgacacctgc cgcgccgggt tcgtgaccaa tgtcaccgag tacatcgcg ggcgaaggt 300
 gaggtggag tgcaagcact tcggcaccgg caagctcgag cgctccatcg acgngtgac 360

cgacgggaac ggcacgtaca cgatcgagct caaggacagc acgangagga catctg 416

<210> 2695

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-D3

<400> 2695

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catcatcctg tcggtgcggc cgagcgccac gaactgcctc gccgacgaga gccacgtgtg 120

ctggaggaac ggcaagtctg cgcaggacat gatcctccgg ctcaggaacg tggagagcgg 180

ggagattcag ctgcagctgc agtggctcag catccctcct gctgcagcca gcagggtgaag 240

gaaacgaagc aatcgcatctt tcaacctctt tgtgaatgtc ggattgtaac aacttaaacc 300

agcaattaat ggggtcaggg tcagtcaggg tagttcatgt gttgccctat taatggtaca 360

ttgggg 366

<210> 2696

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-D4

<400> 2696

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agcttacagg aacatttgag tggatcatgg acggattggt aggcctcttg aaagtccggg 120

tggtgagggg catcaacctt gcctaccgag acgcaagagg cagcgatccg tatgtcgtcc 180

tacgacttgg caagaagaaa cttaagacga gcgtgaagaa gagatctgtg aaccccatct 240

ggcacgagga gctaactctg accgtcacag atcccagcct agctctgaag ctggaggtgt 300

tcgacaagga cacgttcagc agggacgacc cgatggggga cgcggagatc gacgtggcgc 360

cgctggtgga ggcggcgaac g 381

<210> 2697

<211> 420

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-043-Q1-E1-D5

 <400> 2697

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 tgccacccgg cccaacatc accaccaact acaacggcaa gtggctcacc gctagggcca 180
 cctggtacgg tcagcccaac ggtgccggcg ctctgacaa cggcgggtgcg tgcgggatca 240
 agaacgtgaa cctgccaccc tacagcggca tgacggcgtg cggcaacgtc cccatcttca 300
 aggacggcaa gggctgcggc tcatgctacg aggtgagatg caaggaaaaa cctgagtgtc 360
 cgggcaatcg agtcacgggtg tacatcactg acatgaacta cgagcctatc gctcccctac 420

<210> 2698
 <211> 405
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-043-Q1-E1-D6

 <400> 2698

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 cctcacggcc gacggcgtca cctaccataa gacatgcttc aagtgcagcc actgcaaagg 180
 gatcctctcg atgtgcagct actcttccat ggacgggtgtg ctgtactgca agaccactt 240
 cgagcagctc ttcaaggaga cggggagctt ctccaagaac ttcacgccag gtggcaagtc 300
 ttcagacaag ggtgaactga caagggcccc cagcaagcta tcatctgcgt tttctggtac 360
 tcaggataag tgtgcagctt gccagaaaac agtgtaccgc ctgga. 405

<210> 2699
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-043-Q1-E1-D7

 <400> 2699

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 gaaagcccca gctgaggcca ccatctccac acccaagggt gcacctgaga ccactaccat 120
 ccacattgag gttgcgga aacatgcagt agttgagaag gtggaggagg acaaggagga 180
 ggcactaaca gtggcgga aacaagagcc agcagccacc attgagcctc agcagattgc 240
 tagtgaggtg accacttcgg aagtggcggt cgtcgttgtc gagcctgaga acaaagacga 300
 ggaggaagtt gtggagaaga ccgtcatcga gaaggagaag ccatcagcag tccatgcaga 360
 ggaaaatatt gccaccaaca aggtggcagc cgagcccacg acagaattga agaaagaca 419

<210> 2700

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-D8

<400> 2700

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 cgcgctctg ctctgtctt cctcctcct cctcctcgtc tccactgctt ccgctgcacg 120
 gaccgtgggc gacaccgtgc aggacgcgtg cagcaagaca caattcccca agatctgctt 180
 ggacagcctc accgcaaagc cagagagcca gaaggcgacc ccgcgccggc tggcggagct 240
 gttcgtgaac atcgcgccg agaagggatc cgggatggcc acgttcgtgc acgggaagta 300
 caacaacgcc aaggacagca ccgtgttcaa gtgctacgac agctgctcgg acgacgtcga 360
 ggaggccgtc gccacctca acggcctcgt ccgggatcca ccgacgcaa gttcctggag 420
 cttaagtcgt ggggtctcct c 441

<210> 2701

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-D9

<400> 2701

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 cctcggggt gccgtcccg tcttggccgc gcggccggcg tctgcaggct ggggaccccc 120

ggccgtggca gagatctgca tgaagactcc gtcccccgac ctgtgcacca ggacggcggg 180
gaagcacgcc aacaggtaca acgtgggtgga cacggtgacg gtgctagaga tgcattgtgga 240
cgcggttcaag aagcgcggtga acgcggcact gaggttcacc atagaggagg tcaagacggt 300
cgcgacgccc gacgcgcaga gggcactgaa cctctgcaag acctactacc tggacgccgc 360
cgacaac 367

<210> 2702
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-E1

<400> 2702
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tttctccttt tcttgccacg gcaaaacacc ttcgccggcg agagcatggc gatggcgtag 120
cgtgtcctgg aggtcacccct ggtgtcggca aatgacctca agaaagtgtc gctcttctcc 180
cggactcgca tctacgccgt ggcttccatc tccgattcg acctccgcat cccttccac 240
agcacccaag cagaccacag caacggctgc aaccctgtct ggaacgccgt ggtacacttc 300
cccatcccgg ctgccgctga caccgcgggc ctgcactcc acgtgaggct ccgcgcccag 360
cgtctatacc tgggcgattg cgacatccgc gaagtgtttg gtgccaacca acaact 416

<210> 2703
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-E10

<400> 2703
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catagctaag caggtctgac aggatgtcgt ggcagacata cgtcgatgag cacctcatgt 120
gcgagatcga gggccaccac ctgacctccg ctgccatagt cggccacgac ggcgccgttt 180
gggcccagag caccgcattc ccacagttca agacagagga gatgaccaac atcatgaagg 240
acttcgacga gcccggttcc ctggccccga ccggcctctt cctcgggccc accaagtaca 300

tgggtcatcca aggcgagccc ggcgctgtca tccgcgggaa gaagggatct ggaggcataa 360
 ctgtgaagaa gacagggcaa gcgatggtgg tcggcatcta cgacgagccc atgacccccg 420
 gccagtgcaa cat 433

<210> 2704
 <211> 365
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-029-Q1-E1-H10
 <400> 2704

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 gcagcgggcg gcgggcgcct acgggctgat cagcgtcgac aggggtgacc tgatcccggc 120
 gcccttcgac acgccggtcg acgacttccc ggtgctcatc ggcgactggt acaccaagga 180
 ccacgccgtg ctggccaaga acctggacgc cggcaagggg atcgggcggc cggcggggct 240
 ggtgatcaac ggcaagaacg agaaggactc gtcgaacccg cccatgtaca acgtgaaggc 300
 cggcaagacg taccggttcc gcgtgtgcaa cgtgcgcatc aaagcgtcct tcaacgtccg 360
 catcc 365

<210> 2705
 <211> 396
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-029-Q1-E1-H11
 <400> 2705

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 aattataatc tcacagaata ataaacatca tggggcaagc ctcacggctc gtcctcctcg 120
 ccgtcgtggc gctgctgtcc gccggcctcc tcccgcaggc gctgggtaag ggtaggggag 180
 gcaggggaca cgggtggcgcc gtcaacccgc aggtcgccgg catctgctct cgcacccccgt 240
 tcccggaggc gtgcacgtcc accgccgggc ggcacgcgtc caagtacccg gtcacgaca 300
 acctggccgt gctgaacatg caggtggacg cgttcgccaa gcgcaccgcg caggcgcgca 360

agcacgtcgc gaggtcnngc cgcaccatcc cgccgc

396

<210> 2706

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-H12

<400> 2706

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ccatcgcgcc caacaccaac ttcacgtaca agtggcagcc caaggaccag atcggcagct 120

tcttctactt cccgtccatc ggcattgcgc gggcggcggg cgggtacggc gccatcagcg 180

tggtgagccg cctcctcatc cgggtccctc tcgaccagcc gccgccggag agcgaccacg 240

cggtgctcat cggcgactgg tacaccaagg accacgaggt gctggcgcgc cagctcgacg 300

ccggcaagag cgtggggccgc cccgcgggcg tgctcatcaa cggcaaggga ggcaaggacc 360

tggaggccgc cgcgcccatg ctcacct 387

<210> 2707

<211> 287

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-H2

<400> 2707

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ttcagtcata tgacgtgtag gaagctgtgg aaggtcctga ggagcagcag cggtggcggc 120

gatctggatg aagactccgt ccccgacct gtgcaccagg acggcgggga agcacgcaa 180

caagtacaag gtggtggacg cggtgacggg gctagagatg caggtggacg cgttcaagaa 240

gcgcgtgaag gcggcgcgga ggctcgccaa cgatgaggtc aagacgg 287

<210> 2708

<211> 280

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-H3

<400> 2708

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gagcacaacg tgtaccgtct ctccccacgc tgcgcgcgcg cgtggtcgga ggctgccgtc 120

gctcgcgtcg gccgcccccg ccggccacgc agagcgaggg acaacgaccg accgaccgac 180

cagctcgagg tgaatgaaca gccgcatacc gttcctccag aaaatgcacc gctggatcat 240

ccctagctgc ggcgacaccc gccagccgcg cccttctctc 280

<210> 2709

<211> 280

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-H4

<400> 2709

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tcccgccctt ttccgacatt cacagggggg acaggaaatc agcggccatg gcctcgattc 120

cggcgacgac cttcgccgtc atcttatecg tctcttctg tgccgcggct ggcaccgccg 180

tcgacaacga cctccccgac tacgtcatcc agggccgcgt ctattgcgac acctgccgcg 240

ccgggttcgt gaccaatgtc accgagtaca tcgcgggcgc 280

<210> 2710

<211> 303

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-029-Q1-E1-H5

<400> 2710

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ggcagtgttt caggagctg tcgtattctt gtttctctc ctcgtcgcag cagaagtggg 180

aaccatcgat gccaaaatgg gagtagccat gcccatgcat gccttgataa tggagaaagc 240

gaaacagcat gagacggaga ataaggagga gaaaagcagg gagaaggaag agagtcaatg 300

ctt 303

<210> 2711
 <211> 288
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-029-Q1-E1-H7

 <400> 2711

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 tgctgtacgt cctccacggc gaccggggca tggactacgc ggcgctggac tggccgacgc 180
 ggctcaaggt ggccgtcggc gtcgcgcgcg gcacggcggt cctccacacg gcgctcgccg 240
 gacacgaggg gccccacggc aacctcaagt cggccaacgt cctcctcg 288

<210> 2712
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-029-Q1-E1-H9

 <400> 2712

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 gaccagatcg gcagcttctt ctactacccc agcaccggca tgcagcgggc ggcgggcgcc 120
 tacgggctga tcagcgtcca cagccgtgac ctgatccccg tgccttcga cacgccggcc 180
 gacgacttcc cggtgctcat cggcgactgg tacaccaagg accacgccgt gctggccaag 240
 aacctggacg ccggcaaggg gatcggggcg ccggcggggc tggatgatcaa cggcaagaac 300
 gagaaggacg cgtcgaaccc gcccatgtac aacgtggagg ccggcaagac gtaccggttc 360
 cgcgtgtgca acgtgggcat caaggcgtcc ttcaacgtcc gcatccanga ccacatcatg 420
 a 421

<210> 2713
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-A1

<400> 2713

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catccgtcgt cgccaaccgt agcaaggagc caaggacatc accaccgccc agcaataatg 120

gcgcagagca tgaagattgt ggcgctggcc ttggtggccc tgctggtggt ggcggcggcg 180

gcgcccgtgg ccaccgcgta cggctgctac gacgactgct acgagcgcgt cgccaacggc 240

aagaaagacc ccgcctgcac caagatgtgc aaccaggcgt gcggctccac ggaccaaggc 300

gccggtgccg ccggcgccgc gccggcttga tcgccagcg cattcatcgc ttcagctcga 360

tataatcgct gtcctgcag caaccacat atgattcgat caatcttct cctctaattt 420

ctcgaccccg tcgaattttt 440

<210> 2714

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-A10

<400> 2714

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tctcctaccg tgagccggat gggctccagga tgctgccagc ccatggcgcc gggagcgacg 120

gcgacgtctc ctgcgtgggg cactgccctc cgggacagga cctccaccgt ggtgcgacat 180

gggacttcac cttcgcggcc gcgaagccgg cgaagaggaa gacggcgagc gatgtggggt 240

tctccgacat gttcgccgtc gcaccggcgg gggattggtt cggcggcggg tcgacggcgc 300

catcgccggg gccgtcatcg gccgtcaccg acgaagagtt taacctggag atgcatcagt 360

tcagtcaat gctaccactg tctgacgagc acggctggaa cgcataatgc ggccgggtaa 420

aatggaaatc g 431

<210> 2715

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-A11

<400> 2715

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cgacgcaaag gccaaggacg cccctgtcat ctcgccgccc ttcgagagca tcccggagct 120
ccacgagggc gccatgaagg gaaagtggga agctactcct tcgccttccc aaacttggtg 180
gaggacaaga tgaactactc caaggagccg tctcagcagg acctccagcc ggagccagca 240
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gcagacggca gaggcgcagc cgcagacgag cagcaaccg gaggcgactc cggttccggg 360
agcaggacga aagggcggtc tgttctcaag cttcccctgc tgc 403

<210> 2716
<211> 411
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-030-Q1-E1-A12
<400> 2716

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cgcgacgtgc gccgcgtcac gtacctcgac tccgacgtgg tcgtggtgga cgacgtccgg 180
acgctggcgt ccgtggacct cgcggggccac gtggtggcgg cggccgagta ctgccacgcc 240
aacttcagca actacttcac ggacgccttc tggtcgcacc cggcgctcaa cggcaccttc 300
cacgggcgcc gcccatgcta cttcaacacg ggcgtcatgg tcatggacgt cgacaagtgg 360
cgcgccggcg ggtacacgcg cggggtggag gagtggatgg ccgtgcagaa g 411

<210> 2717
<211> 419
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-030-Q1-E1-A2
<400> 2717

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tgatggtggt ggagggcaac catgagatcg agcagcagat ccacaacagg acgttcgcgg 180

cctacagctc ccggttcgcg ttcccgtcgg aggagagcgg gtcctcctcg ccgttctact 240
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 gatcaggtgc gcagtacaag tggctggagg cggacctgga gaaggtggac aggtcgggtga 360
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<210> 2718
 <211> 394
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-A5

<400> 2718

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 gcggctgctg atgacgattg caagcctgcc ggtgacgagt caacgtcgtg gaagcgccctc 180
 gtggacggta tgcgcccgtc ccgcctccgc gggcagctgg agtactaccc gccgccaccg 240
 ccgccaccgc cgctggggcca cgccgatgtg taccatgacg tgatcctccc gccgccgtcg 300
 caggcacggt tcggcttcga gatcaaggag gtgggcatga ccagccgcta cgcgtccgct 360
 gaggatctng cacagatgga cagcgaccag gaag 394

<210> 2719
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-A6

<400> 2719

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 ttaattttctc ctgcaccggc cagcgcaatt ctgtggctcg atcgatcggc cggctcgtaag 120
 gcaagtgagc aagctatata tatatatagg agattcttcg agcgagctag tagcgagatg 180
 ggttccgccg tctcttttta ctgcatctgc atcgccgtcg tcgtcgcatt gtcgtcgtcc 240
 atggtcgccg tcggggccgc cgccccgggg gaaaccccca agttcatctc ggcgagcgcc 300

cttgagtgct ccgctaacgt aacggaaata gcaaaggcgc gcaagctgat cgatgtccat 360
ggccacgggc tgtgcccggg gcggttccga cacacgcgcg ggatcagcgc ggtggcaaca 420
actgcaagga ccgcccgtg c 441

<210> 2720
<211> 342
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-A8

<400> 2720

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ggatctgctg tccgccgggc tcttcacgca ggcgctgggt aacggtaagg gaggcacggg 180
acaccgttgc cccgtcaacc cgcaggtcgc cgggatctgc tcgcgcaccc cgttcccgga 240
ggtgtgcacg tccaccgccg ggcagcacgc gtccatgtac ccggtcatcg acaacctggg 300
cgtgctgaac atggacgtgg acgcgttcgc caagcgcaac gc 342

<210> 2721
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-A9

<400> 2721

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acctgccacc ctacagcggc atgacggcgt gcggcaacgt ccccatcttc aaggacggca 120
agggctgctg ctcatgtac gaggtgagat gcaaggaaaa acctgagtgc tcgggcaatc 180
cagtcacggg gtacatcact gacatgaact acgagcctat cgctccctac cacttcgact 240
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gcggcatcat ggacgtcgag ttcagaaggg tgcatgcaa gtaccccgcc gggcagaaga 360
tcgtgttcca catcgagaac ggctgcaacc ccaactacct ggccgtgctg gtgaagtatg 420
tggcggac 428

<210> 2722
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B10

<400> 2722

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 gcaccaggac ggccggggaag cacgccaaca agtacaaggt ggtggacgcg gtgacgggtgc 180
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<210> 2723
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<223> Clone ID: LIB148-030-Q1-E1-B11

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<210> 2724
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 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B12

<400> 2724

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<210> 2725

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B2

<400> 2725

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cggccagacg cgggcacgat atgcaggccg ccgccgccgc cccatggatg acgaagaccc 180
tgccggtggt tgggaaccac ctgggaacc ccacgcgcct cacaagcgcc tcctcgtcct 240
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aaaaaggagc acgaaaggca tccaggaatt atgagaggtg tgtagttcgg caaaaacgag 360
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<210> 2726

<211> 93

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B3

<400> 2726

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<210> 2727

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B4

<400> 2727

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ggcggtaccc cctccctat cagcctcat cgaatcctca gatctaagtt ttttttggtt 180

ttgtgagtta tccaaagttg gaccgcaaag atgagtactg ctaatcacta tcagcacatc 240

aagtcaacca agcctgttgt agatctacta atattggagt gtttctttgc ttaaaatgtg 300

gagatgttca tagggcactt ggacctgaca tttcaaaggt tttatctgta actttggatg 360

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<210> 2728

<211> 350

<212> DNA

<213> Zea mays

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acgtgtacta cgacaacgac gaagaagaat gaacagctag cagacgtacc ggcggccgat 180

tcacaagtgt acagaaaacg atcgactcca ctccaactat acatataccta ctatggcttt 240

tgctacaacc cgatggatca gaaggcatgc atgcatgtac aggcaggcat ggccatggcg 300

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<210> 2729
<211> 365
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B6

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cgctg 365

<210> 2730
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B7

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<210> 2731
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B8

<400> 2731

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taccctgaga agccaccatc agttcgattt cattcaagaa taaacttaac atgcgttaat 300
catgaaactg gagtggttga cccgaagaag ttcagcgttc tgggtaactg gcagcgtgat 360
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<210> 2732

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-B9

<400> 2732

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tcgatcctcc atggtcaagg catcggggcg aaccagcaaa tatctcgggg cgcggtggaa 180
cgtcccatga tgactgctcg cgcggggggg tccaatgctg gcggaagtgt tgccgtaaag 240
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catctatgct cgactccacg cagcgtgagg acacgtgtca tctgaagagc aagttgggac 360
ctggaatctc aagccctaag tcaagaacag gtaccgcatg ttgaggcgct tggaggatgc 420
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<210> 2733

<211> 72

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-C1

<400> 2733

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<210> 2734
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-C10

<400> 2734

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aggatgctgt cacccttatg ctcaagtgtc gtcaggcaaa tcttcttctt tcctcgttat 180
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acagcttgat gctattgttt tctagagcca agggctcagg tgccgacgtt ttggttggtta 300
gctttcagct tgcttttttca ttaagaagtg tttcgttaca agcaggtttt cttccacctt 360
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<210> 2735
<211> 394
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-030-Q1-E1-C12

<400> 2735

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gggatctcca cttcatctgg aaagcagcct gcataatgt cgatactccg tgtaaggtag 180
atgctatata aactgtcaga gtatattggg catgttagaa tatattagac aactactaat 240
atgattggtt taggattgat tataatcctg gataaccttc cttgtatcta agataacatt 300
ccttgatatc aagataatct tccttatctc taggatagcc ttcttgcctt caagtcgtgt 360
attcctatat attctctcta aaggcttcat tgan 394

<210> 2736
 <211> 398
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-C2

 <400> 2736

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<210> 2737
 <211> 398
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-C3

 <400> 2737

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 cgctgggaag cacgtcccc gtgctgtttt tgttgacctt gagccactg tcatcgatga 360
 ggtgaggact ggcacctacc gccagctctt ccacctctg 398

<210> 2738
 <211> 385
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-C4

<400> 2738

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cgccggaggt gctggccaag ctcccgcccg acgtgctggc cagcatcccg ccggagacgc 180
tggccaacat cgcggcgtcg caggggcagc tgcagacgag cgagatcctg gccaccatcc 240
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tcacggccgt gcagagccaa ctgccgggca acattacgcc cgagatgatg accagtctcg 360
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<210> 2739

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-C5

<400> 2739

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ccgcgtgctc tatggccgca cgcgcctggc cttgccatct gtggagctcg gcagccggag 180
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ccgcaggatg aggcgcgtga aggatgctgt gatgagttcg tgagtggctc aggccgtcgt 360
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<210> 2740

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-C6

<400> 2740

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cagcgctggc tttcgtctcc agggccgcgg cgcagggcaa cggctgttcc agcgtgatga 240
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<210> 2741
<211> 375
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-030-Q1-E1-C7
<400> 2741

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aaataccgca cgatcaatcc ggaatggaac gaggaactca ccctgtccat cacaacatg 180
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gtcnccgacg gcacggtgat gaagacgatc cacacggaga agggcagctg cctcgccacc 360
gacaggcaca tcacg 375

<210> 2742
<211> 389
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-030-Q1-E1-C8
<400> 2742

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tcgccgtcgt ccggcagggg taatataatt tggttcttct ccggccgggt gtgcatggca 120
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tacttcgaca aggtgcgcga taacaagggc gcaacggcgc cgccgctgcg ccggccgcgc 240
agccccaacg accccgaccc cgaccgcgag cccgagccat aggagggggcc aatgaggaga 300
gtccccccgc cgtcgctgct gatgccggcg accgcatgag gccaccgcga gccgcccgcg 360
ccggggcgcg gccacgggca gagccaccg 389

<210> 2743
<211> 173
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-C9

<400> 2743

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aggtccattc aattctaatt agacgcctga tgaggctact agcaaacaac aaa 173

<210> 2744
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-D1

<400> 2744

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<210> 2745
<211> 415
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-030-Q1-E1-D10

<400> 2745

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<210> 2746
<211> 429
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-030-Q1-E1-D11

<400> 2746

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gtacgaccg ccgctcgtc atgttcgacg gccaccggga aatcttctta tccgggtcca 240
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agttcaactt cgaggggcag aacgacgtgg tgaggttctt ccagctgatc caagagcacg 420
acatgtacg 429

<210> 2747
<211> 377
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-D12

<400> 2747

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gctccctggc ctcatcctgg gctgctccgt cctggaggcc ggcggcagcg tggacgcca 180

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cgtgtacaac gtggacg 377

<210> 2748

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-D3

<400> 2748

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ctgaccacgg tggccggcgt cgcgctcgcc aagtcgaagc tcgccaagaa gagcgacgac 180

gtcgtgaacg ggcccctcct gaccgagaag atccaggcga agaagacgct gatcgtgggg 240

ccggacgagg agttcaagac cgtgcagtcc gccatcgacg cggtgcccgc cggcaacgcc 300

gagtgggtca tcgtccacct ccgctctggc ctgcacaggg gcaaagttgt gataccggag 360

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<210> 2749

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-D4

<400> 2749

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ctcactcatc gtccacccgt tcccactacc ataccacaca tatgcattct atgcctgccg 180
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<210> 2750
 <211> 358
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-D5

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 aatcatcccc aggccgcacg ccatcccgac ggtgcaagtc tctaacgcgg cggggcagaa 300
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<210> 2751
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-D6

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 gtccccgcgc gtgtggctgc tcgccatggc actggcgctc gcctgcgtgc tgctcgtgag 180
 gtccgcccac gctgctgccg aggcgtcccc gactccaggc ggctccacct acgggtgcaa 240
 cccggccacg gacaagtcgt gcaagcccga gggcggtggg gtggtgctgc cgggcggcgg 300
 catcgacctc gacggcgacg gtgacgagga cgagctgccg cagttccaac cccacctcat 360

<210> 2752
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-D9

 <400> 2752

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 cgcacgtcgc cccgggggtc acgtcacca ccgagcccca accaattaat aatatatata 120
 tatagctagg atcgatcgtc agtaaaatgg caggctccgc cgtcctgagg agccccctgt 180
 ccgtcctcct ctacatcctc gccgcggtgc ccgccaccgc cgcggcgacg ccgaccgacg 240
 ccgccatcga cgaggcggtac gcgcacgtcg tcaacctcac cgctaaccag gagtactggg 300
 cggagcgcgc ggaggcggcg cacgcgtaca accgcgcggc gtaccagacc gaccccgtag 360
 ccgtcgtgca gcgcttcaac gacggcgtgc acanggcgac ggcgacgcgg tcgcggtccc 420
 tggcgcacag ggc 433

<210> 2753
 <211> 432
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-E10

 <400> 2753

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 ataggatttg gggcacccat tcgtacgaac atgagaagtt ctggagctag ctgtccaatg 120
 gttacctcat ctttattaga atctgttgaa agtggtgatc ttgtaagata tgggtctaatt 180
 ccggagttca ttggtcgttt gccatttcta gtaagtttgg cagctctgaa tgaaggccag 240
 ctcgttcagg ttctgacaga accaaagaat tcactttcca aacaatacag gaaaatgttt 300
 aacctgaaca aagttaggct gcacttcact gatggtgcac ttagattgtt agctaagaag 360
 gcgatagcta aaagcactgg tgctcgtggg ttaagagcca tcttgaaaac tgttcttttg 420
 gaggccatgt at 432

<210> 2754
 <211> 432
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-E11

<400> 2754

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 accacggacg gcggcgcggtg cggctacaag ggcgagctgg ggaaagacta cggcaccctg 120
 acggcgggccg tggggcccgtc gctgtacacc aacggcacccg ggtgcggcgc gtgctatgag 180
 ctcaagggcc ccaagggcac cgtggtggtg acggccacca acgacgcccc gccgccgggtg 240
 agcgggcaga agggcgagca cttcgacctc accataccgg cgttcctcaa gatcgccgag 300
 gagaaggccg gcatcgtgcc catcacctac cgcaagggtg cgtgcgagag gaaaggcggc 360
 atccggtaca cgatcacggn gaaccagcac tacagcgagg tgaacggtga caccgtgggc 420
 ggcgccgggg ac 432

<210> 2755
 <211> 424
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-E12

<400> 2755

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 gtaccagcaa atgagagaca cagaaaatac cctgtcacac agcgccatta tggctcgaat 120
 gaccaccagg gtatccatca cggcttcgaa tgggtggctta gaccatgacc tctccatcgc 180
 cgataaaatc agtggcgaga atgacagctc ccatgcagtt cagcatgggtt ttgactggaa 240
 gtgggtggtt tttgggtggtg cgggtggctgc ggtttgtgtg ctcaacaccg gactggtagg 300
 caaggctctg ttgcttggag cagcgagacg gcaggcaaag aagtgatgtg aggagcaacc 360
 ttccagcctc tgcagaaagg cattcgtcag gctgtagcta caaccgtaca ggcaaaaagt 420
 attg 424

<210> 2756
 <211> 334
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-E2

 <400> 2756

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 tgattcatct tgccaaaaaa cctgcgtgcc ctccttcccc tcccatccg aacacgctcc 120
 cttcggctcc ggcaagacaa atcaagtcgc gatggagatg aagaaggctc cctgcgccgt 180
 cctgcgccgc gccgcctccg ccacgtggt cctgcgccgc gaggccccgg cgcccgcccc 240
 catcagcgcc tcctcggcgc cgttccccgc cgtcggcacc gtgctgggcg cctccgtgct 300
 ctccttcttc gcctactacc tgcagtaaaa ttaa 334

<210> 2757
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-017-Q1-E1-F10

 <400> 2757

 gtccgtaatt cacgggtcgc cccacgcgtc cgggcatgca gatcttcgtg aagaccctga 60
 ccggcaagac tatcaccctt gaggtggagt cttcagacac catcgacaac gtcaaggcca 120
 agatccagga caaggagggc atcccaccgg accagcagcg tttgatcttc gctggcaagc 180
 agctggagga tggccgcacc cttgcggatt acaacatcca gaaggagagc accctccacc 240
 tgggtgctccg tctcaggggt ggcattgcaga tctttgtgaa gacactcact ggcaagacaa 300
 tcacccttga ggtggagtct tcgggataca ttgacaatgt ccaaggcaaa aattcatgaa 360
 caaggaggca tcccaccgga acagcaacgc ctcatcttcg cccgcaagca actggaa 417

<210> 2758
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-017-Q1-E1-F12

<400> 2758

ggtcgacgca cgcgtccgct ggaagagaag gttctggaat acatgagagc accaatttat 60

gtttattatg aacttgagaa tttctatcag aatcaccgca ggtatgtcaa aagtagaagc 120

gataaacagc tgcgttttgg ggcaaaatac acggccgact cgtgcagtcc tgttgagtgg 180

gataataatg gttccccaat tgttccctgc ggcttgattg cctggagctt attcaatgat 240

acatatggtt ttactcgtgg gtccaaggaa ataaaggta acaggaaaaa catttcatgg 300

aagagcgacc gggagcataa tttggcaaac atgtgtttcc ctccaacttt cagaacggaa 360

ccttgattgg aggggggaaa ctccgaccta ctgtcccg 399

<210> 2759

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-F2

<400> 2759

ggtcaggaat acccgggtcg acccacgcgt ccggtgttca ccgccaacga ctgcccggcc 60

gatcagaaga tccccctcca ccacgagatg gctcaggttc caacatttcc gtccaaattg 120

ttcttcttct gcgaagtgga gccaaagagt ggcgagaga cgccggttgt accgagccat 180

tatgtctaca agaggatgaa ggagaaattc cctggattcg tggagaaact ggagaaggac 240

atgattgtat atacaagggg tttaggagag ggcgataacc cgtcctcgtc aatcggtcgt 300

ggatggcaat cgacatttct cactaaagat aaagtgttg ctgaggaaaag ggccgcaaag 360

ctcgggataa agctagaatg gaccgacgac agcgtgaaga cggtcatggg ccccatcccc 420

gcggtgaagt ggg 433

<210> 2760

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-F3

<400> 2760

cggtcaggat atccgggtcg acccacgcgt ccgcgcgtgt ctaggtttcc tctctcacca 60

tagcgcccg tctgtcgccc ttcgttcacc tctccttctt ctcgtccctg cctgccaggg 120
agaggggaag tcagaggcac ggagtggcgc agagcagacg cccgtgaacc attgtagctg 180
tccctgtcgt cgctcgtcgtc aacgaaccca cacaaggaaa ggatggagaa gaagccgacc 240
atcctcatga acaggtaaga gctcggggcgc acgctcgggc agggcacctt cgccaagggtg 300
taccacggcc ggaacctcgc gtccggcgag agcgtggcca tcaagggtcat cgacaaggag 360
aagggtgatgc gcgtcggcat gatcgaccag atcaagcgcg agattcccgt catgcgcctc 420
gtccgcaacc caacg 435

<210> 2761
<211> 429
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-017-Q1-E1-F4
<400> 2761

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accgacctgg tgaccgtcgt ggggtcgacg ccggatggct agtggctgaa caccgtgggtg 120
gaccgggacc tgcggggcga ggaggaggag gacacagagg agatgggtgaa gctgatcagg 180
gtccgcatgg cgtgctgcga gagcaacgtg gacaaccggt gggagctcaa gaccgccatc 240
gacaggatcg aggagctcaa ggcgaaggag cggcccgacg aggagcacgc gacgggtgatc 300
gaccacgact acagcgatgt tgccctcaac tgatcatcga cacgaaacgg ccgggaatcg 360
atcgatacgg agggttgtgc gcaagctgat gatatgagcc caaaatgtga tgacctgcat 420
gcatgccga 429

<210> 2762
<211> 404
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-017-Q1-E1-F5
<400> 2762

ccacgcgtcc gccacgcgt ccgcctggtt caagaagggg tacaggccgg ccgtcatgct 60
ggcacagccg cacggctcca gcagcctcaa ggatgtccag gtcgccttca gcaacgccga 120

cttctccttc cgcgagctag ccgatgccgc aggaaacttc cgccaggaca acctcatcgg 360
agagggaggc ttcggtcgcg tctacaaagc ccgcctgcc actc 404

<210> 2765
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-F8

<400> 2765

cccggctcga cccacgcgtc agcgatggat cagaccgggc tctttcgtcc tgtacttgg 60
cttcttcttc ctgtccgcag ccctgtcgga ggccaatc ggcgacttcg atgaatactg 120
gcagcagctc aagctcatgg ccgacgccgc ggctgatgcc acgtacaagc atgacccgg 180
cgaggtcgcc aaccaactta accgtgcagt ccacagatcc gtcgagaagg aggacattgg 240
cacgaggcgg gagatgatgg ggacgacgac taggaagtct aagttcagcg ggccgtgcag 300
ggcgacgaac ccgatcgacc ggtgctggcg gtgccggcag gactgggcga cggaccggaa 360
gcgcctggcg cgggtgcgcca aggggttcgg gcgcatacc accggcgggc t 411

<210> 2766
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-G2

<400> 2766

ccggctcgac ccacgcgtca ggttttgaac aaatggtggc gcataacaaa tacacttg 60
caatatgctc taaaacagct cttgatttga cacatcattg ggaaatgttg gatcaagaga 120
tcgaagccac gatcatgcct cttgtgtatc gctacaagat ttgggtgctt tgcaacgatt 180
gcaacaaggt ctcagaggtg aactttcacg tgattggcca caagtgcagc cactgcagat 240
cgtacaacac ccgaacgaca tcgcgccttg cagatttatc gggaagcagc tcaccttcaa 300
cagactcatc cgacaacaac atatagagaa gaaaccattg acagagccaa tatgattgaa 360
gaaccgaagg aggaaatatt gtttcggggc gtgcgtgctt gccaaacttg aagactccca 420
gccg 424

<210> 2767
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-017-Q1-E1-G3

 <400> 2767

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 atcagacatg gctgcgaagg acggctcagg gtcacaggac caggggcaca ggttgtggcc 120
 catgctgtcc tacgcttgcg gcgagctatg tgtgatcatg ctgctctacg tggctgcctt 180
 tgcattccat gcagccacaa ggctggcgcg catctgcggg ctcaggccac catgcatcct 240
 gtgcacgagg ctggaccgcg ccttccatgg aaacttgcca tggttctccg cggacctggt 300
 ctgttccgtg catcggtccg aggtctcgtc tctggctcac tgcaagagcc atggccggct 360
 tgcacggtcc ggcgatctct gcaaattcatg cctcctttca tgcacggcgg taggtg 416

<210> 2768
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-017-Q1-E1-G4

 <400> 2768

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 catgcgcctc gtccgccacc ccaacgtcgt gcagctgcac gaggtgatgg ccagcaagag 120
 caagatatac ttccgcatgg agtacgtccg gggcggcgag ctcttcgccc gcgtcgcccg 180
 cggccggctc aaggaggacg ccgcgagaag gtacttccac cagctcgtcg gcgccgtcga 240
 cttctgccac agccgcggcg tctaccaccg cgacctcaag cccgagaacc tcctcgtcga 300
 cgagcacggc aacctcaagg tctccgactt cggcctcagc gcgctcaggg agtgccagaa 360
 gcaggacggc ctgctgcaca ccacctgcgg caccgccgcg tacgtcgcgc cggagatcat 420
 caacaagaag ggctacga 438

<210> 2769
 <211> 402
 <212> DNA

<213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-017-Q1-E1-G5

<400> 2769

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 ttccccctct ctcgcagttc tcgcgctccac tgtaccggag ctccaccacg gcctccggaa 120
 agaaacagat gaaagacagc gacggcgagg gcaccggcgg tggcgtcgcc cgctcgcacc 180
 cctccaatct cccgcttccg actccacagt ccgaccggaa cctccagttc tcgggtggga 240
 cggacgatga gtctctgagc cggaatagca gtcctctctg caccggcggc gcgagccccg 300
 ggtactactc ggactaccgg tctagcttca gcggcgagtg ttcgccgtac aacatgtcnc 360
 cctggaacca gaccatggcg ttcccttggt cgcaacacaa cg 402

<210> 2770
 <211> 414
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-017-Q1-E1-G6

<400> 2770

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 ccatcgagca cgggatcgct agcaactggg acgacatgga gaagatctgg catcacacct 120
 tctacaacga gtcctcgctg gctcccgagg agcaccctgt cctcctcacc gaggcgcccc 180
 tgaaccccaa ggctaacagg gagaagatga ccagatcat gttcgagacc ttcaacaccc 240
 ccgctatgta cgtcgccatc caggccgtgc tctctctgta tgccagtggc cgtaccacag 300
 gtatcggtgt cgactcggga gatggtgtga gccacaccgt ccccatctac gagggatagc 360
 ccctcnccca cgccatcctt cgccttgatc tggccggctc cgacctcacc gact 414

<210> 2771
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-G7

<400> 2771

ccacgcgtcc ggcggtggcc acgatgacga ctaataagcc cctcctcctc ctcgccctgg 60

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actgggtggc gatgaaccag cagagctacg cgctgtacgc gcagaagtcc gtcggggacg 180

ggggcaagga gcccctggac aagaagctgt cggaggcgga gaagaagaag gtcacgtacg 240

tggtggaccc cagcggcaag ggcgactaca ccaacatcac cgcggcgctg gaggatatcc 300

cggtgagcaa caccaagcgc gtgatcctgg atctcaagcc cggcgctcag ttccgcgaga 360

agctgttctt gaacatcagc aagccgttca tcacgttcc 399

<210> 2772

<211> 409

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-017-Q1-E1-G9

<400> 2772

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accctgtccg tgcaccagct ggtggagaac gccgacgagt gcatggctct tgacaacgag 120

gcgctctatg atatttgctt ccgcaccctc aagctcacca acccttcatt tggcgacctg 180

aaccatctga tctcggcgac catgagcggc gtgacgtgct gcttgcggtt cccggggccag 240

ctgaactcgg acctccgcaa gctggcggtg aacctgatch cgttcncgcg gctgcacttc 300

ttcatgggtg ggttcgcgcc gctgacgtcg cgcggtcgc agcagtaccg cgcgctgacg 360

gtgccggagc tgacgcagca gatgtgggat gccagaaca tgatgtgcg 409

<210> 2773

<211> 422

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-017-Q1-E1-H1

<400> 2773

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gtttacacgg ggaagcggct gcacgcggcc ttgttcttcg tgatgggatt ctggctgctg 120
gacttttcca acaacacggt gcagggcccc gcacgcgcgc tgatggcgga cctcgcaggc 180
agccacggac ccagcacggc gaacgccatc ttcgtgtcgt ggatggcgat cgggaacatc 240
ctgggctact cgtcgggggtc caccgacaag tggcacacct ggttcccgtt cctgcagacg 300
agggcatgct gcgaggcgtg cgccaacctc aaggccgcct tcctggtgtc ggtggtgttc 360
ctgngcctgt ccacggtggt gaccatgata ttcgcccgcg aggtgccgct ggaaccggcg 420
gc 422

<210> 2774
<211> 432
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-017-Q1-E1-H2
<400> 2774

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aaggcctttt tttttttgag ataacaagga ggagaggagg agatggcggg cagcatcacc 120
tgggtgaagg cgaggcagat cttcgacagc cgcggcaacc ccaccgtcga ggtggacgtg 180
ggcctcagcg acggcagcta cgcgaggggg gccgtaccca gcggcgcata cactggaata 240
tatgaggcct tggagttgag ggatggagga tctgattatc ttggcaaggg tgttcttaag 300
gctgtcagca acgtaaaca cattattgga ccagcgattg ttggaaagga cccactgag 360
caggttgaga ttgacaactt catggtccaa cagcttgatg gaacctccaa tgaatggggc 420
tggtgcaaac ag 432

<210> 2775
<211> 442
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-017-Q1-E1-H4
<400> 2775

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ctccctctcc ctctccgata cattctccag cgcagcgaag taaacatgtc tgaccgggca 120

aagatgtcgt ggcaggcgta cgtggacgag cacctgatgt gcgagatcga gggccaccac 180
ctcgcggcgg cggccatcgt cggccacgac ggtgccgcct gggcgagag cacggcggtc 240
cccagagttca agaccgagga catggccaac atcatgaagg acttcgacga gccagggcac 300
ctcgcgccga caggcctggt cctcggacct accaagtaca tggcatcca aggcgagcct 360
ggtgccgtca tccgtggcaa gaagggatca ggaggcatca cctgaagaa gacagggcag 420
gcactcgtgg ttggcatcta cg 442

<210> 2776

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-H5

<400> 2776

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cgacatccac aggggggagg ggaaaacacg tgcattcacc cggcggaat aatggcctcg 120
gttccggctc cggcgacgac gaccgccgcc gtaatcctat gcctatgcgt cgctctctcc 180
tgtgccgagg ctgacgaccc caacctcccc gactacgtca tccagggccg cgtgtactgc 240
gacacctgcc gcgccggggt cgtgaccaac gtcaccgagt acatcgcggg cgccaagggtg 300
aggctggagt gcaggcactt cggcaccggc aagctcgagc gcgccatcga cggggtcacc 360
gacgcgaccg gcacctacac gatcgagctc aaagacagcc acgaggagga catc 414

<210> 2777

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-017-Q1-E1-H6

<400> 2777

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acatggcaca gccgatgaga tcgtggactt cacgcatggc aagcggtgt gggagctagc 120
caaggagaag tacgagccgc tgtggatcaa aggcggtggg cattgcaacc tggagacgta 180
cccggagtac atcaggcacc tgcgcaagtt cataaacgcc atggagaagc tggcaaagga 240

cagcaaggcg gccagggcgc cgccgccgtc gagcatggcc gacgaagtaa gacgcaccaa 300
 gtgcttgaga ttcgggaaga gatgaggctg gcggcgaggc catgcgggtc tcggccgtct 360
 ttagctgcgt acgccagtca ctaaccccct gctgcattgc attgcattgc tttgctgctg 420
 cacgtgc 427

<210> 2778
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-017-Q1-E1-H7
 <400> 2778

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 cggattggta ggcctcttga aagttcgcgt ggtccgggggt atcaaccttg cctaccgcga 120
 cgcaagaggc agcgatccgt atgtcgtcct acggcttggc aagaagacaa gcgatgaagaa 180
 gagatccgtg aaccccatat ggcaagagga gctaactctg accgtcacag atcccagcca 240
 accactgaag ctggagggtg tcgacaagga caccttcagc agagacgacc ccatggggaga 300
 cgcggagggtg gacgtggcgc cactgatgga ggcggtgagc atgaacccgc gggaggagag 360
 tctgangaac ggcgccatca tcagggtccga gcggccgagc gccaggaact gcctcg 416

<210> 2779
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-018-Q1-E1-A1
 <400> 2779

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 ggatcggctg gggcgctcgg cgtcgtgggc accgactcgg cgaccatcgc gctgcccggc 120
 ggcaagggtg cgcagctgca agacgtggtc ctgggttgc cctccacgca tgatggccag 180
 agcttcaagt cagtagacgg cgtgctgagc ctgggcaacg ccaagatctc gttcgcgtcc 240
 cgcgccgccg cgcgcttcgg tggtagcttc tctactgcc tcgtcgacca cctcgccccg 300
 cgcaacgcca ccgggtacct tgccttcggc ccagggcagg tgccccggac cccggcgagc 360

398

<210> 2782

<211> 401
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-A2

 <400> 2782

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 ccaccacctc acgtcggcag gcatcgtcgg ccacgacggc gccacctggg ctcagagcac 120
 cgcattcccc gagttcaagc ccgaggagat ggctgccatc atgaaggatt tcgacgagcc 180
 ggggcacctc gccccgaccg gcctgatact gggaggcacc aagtacatgg tcatccaagg 240
 cgaacctgga gctgtcatcc gtggcaagaa gggatccggg ggcatcactg tgaagaaaac 300
 agggcagtca ctcatcattg gcatctacga cgagcccatg actcccgggc agtgcaacct 360
 ggtggtggaa aggctgggcy actacctgct cgaacagggg a 401

<210> 2783
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-A3

 <400> 2783

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 gccttctgct ctgctccctc gaaatggagg cgacgagcaa ggcgatggct tcaggcctcc 120
 tcgttctgct gcttctcacc aacacaggct ttgtcctgcc cgtccattcc gaggactgct 180
 gggccgacac ccgcgtcacc tgcaccaaga cgacaaactg ccgggacgac acttgcgcg 240
 ggcgcgcat gccggacggc cgctgccact gggagttccc caacctgggtg cccttctgcc 300
 agtgcctgcy ccccaactgc cactagtccg ggcgctcgg attggctcac ttcgccggcg 360
 atgatggatg gtgcccact gcgactgcc agtctgctcc attcgttgtt gtttaaggca 420
 taatatataa actg 434

<210> 2784
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-A4

<400> 2784

cggtgcagaa ttcacgggac gacccacgcg tccgagtcgc tgcagcagaa cgcgcggtgc 60
cagcccacgc tgggtggtcga gctggcgctc ccgacgcacg cgctgctccg cgagctcggc 120
gcccacgcgg gcgcgcgcac cgtgctggag gtcgagaagc gcgccgagca gggcaccacc 180
gacggcaacg aggccatcgc caccaccgac cagcaggggt ggggtgctgga ggagctcatg 240
tggaccatgt tctgcaacgg caagaggggt ggctacgcgg tgcggcgagg cccaccgag 300
gaggacatcg ccgtgctgga gacgctgtgg gccgtctcca tgggcggcgg cgtgctcccc 360
ggtacgtcgg acatggacgg ccccgacggc gagatggggg acatgcgccg gagctt 416

<210> 2785

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-A5

<400> 2785

gtaccggtct agaattcccg ggccgacca cggtccagg cgctcaccgc cgtcctacct 60
tcatatacct agcagtgtct ctgcatagaa agataaaagg taggaggagg cgagtgcggt 120
ggtgggatta tttgtgagga gatattggag ttattatata tatatatata ggtagacgat 180
agatagacag ctagatctat ataaccatgg tggatggggt ccgatggatc agaccgggct 240
ctttcgctct gtaacttggtc ttcttcttcc tgtccgcagc cctgtcggag gccaatatcg 300
gcgacttcga tgaatactgg cagcagcgca agctcatggc cgacgccgcg gctgaggcca 360
cgtacaagca tgaccgggtc gaggtcgcca accaacttaa ccgtgcagtc cacagatccg 420
tcgagaagga tgacattggc accagg 446

<210> 2786

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-A6

<400> 2786

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aatacatcgc tagctcgcca ccaacaatgg cctcaaggta ctctatcctg cttgccacaa 120
cggcactggc tatgttggtc gcattcggtt cgtgcaccac ccactcacc ttccaggctg 180
gcaagggctc caagcctggc cacctgggtc tcaccctaa cattgccacc atctctgacg 240
tggagatcaa ggagcatggc ggcgacgatt tctcctttac actcaaggag ggcccagctg 300
gcacttgga cgtcgacacc aaggccccgc tcaagtaccc cctctgcac cgttttgcta 360
ccaagtctgg cggctaccgt atcgccgatg atgtcatccc cgccgatttc 410

<210> 2787

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-A7

<400> 2787

taccggtcta gaattcccg ggcgaccac gcgtccaatc ccacaccacc accacctcct 60
ccggtcccca acccctgtcg caccgcagcc gccggccatg gcctgcctca ccgacctcgt 120
caacctcaac ctctcggaca acaccgagaa gatcatcgcg gaatacatat ggatcggtgg 180
atctggcatg gatctcagga gcaaagcaag gacctctccc ggcccgggtga ccgatcccag 240
caagctgccc aagtggaaact acgacggctc cagcacgggc caggcccccg gcgaggacag 300
cgaggatcatc ctgtaccgc aggccatctt caaggacca ttcaggaggg gcaacaacat 360
ccttgatgatg tgcgattgct acacccagc cggcgagcca atccccacca acaagaagta 420
caacgccgcc aagatcttca gcagccctg 449

<210> 2788

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-A8

<400> 2788

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tttatcaacg cttctcctgc tggttactcc gcgcgccttc tctttctctc ccggacgtcg 120

atcgtgttct tcagcacggg ctagctagct ccctccctcc cagccatggc gacgccggac 180
aacaaggggc acgggcatcc gctgcccaag tttggggagt gggacgtgaa gaatccggcc 240
acgtccgagg gcttcaccgt catattccag aaggcccgcg acgacaagaa gaccaccacc 300
ggccctgggg ctgggaacgc gcgcgcaggc attccgccgg ccttcaggaa cggcggcggc 360
gacggcgggt acaggcccgga cttcggcgac ggcaaccagt acacgccggc caaaccggaa 420
aaagtgg 427

<210> 2789
<211> 431
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-018-Q1-E1-A9

<400> 2789

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cttgggtcgg ccctgcatgc agtangggag gatgaccgtg ctatccagga gtttcagaca 120
gcaattgatc tcaaacctgg ccatgttgat gccttgatac atcttgggtg attgaacatg 180
gatgctggcc gcttcgtacg ggctgcagag atgtatactc gtgtgctgag catccgacca 240
aaccattggc gtgcgcagct aaacaaggca gtggccttgc ttgggcaggg tgaatccgag 300
gaggctaaga aggcactcaa ggaggcgttt aagatgacac agagggtgga agtgtatgat 360
gctatctcac atttgaagac attgcaaaag aagaagctaa agccttccaa aggaaaaaat 420
gatggtcaag g 431

<210> 2790
<211> 450
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-018-Q1-E1-B1

<400> 2790

attcncgggt agaccacgc gtccgataaa taaagcagct cctccggggg cggcgaacta 60
ctcctcgtcg ccaaaaccct agccctgctt ctttgccatg gcgagcagcg ctagccaggc 120

gagcctcctg ctccagaagc agctcaagga tcttgccaag aacccccgtgg atgggttctc 180
 cgccggggtt gtagacgaca gcaacatctt cgagtggcag gtcaccatca tcggaccgcc 240
 tgacacccta tatgatggag gctacttcaa tgcaataatg accttccccc agaactatcc 300
 caacagcccc ccatcagtaa gatttacttc tgagatgtgg catccgaatg tttatcctga 360
 tggacgtgtt tgcatttcta ttcttcatcc acctggtgaa gatcccaatg gttatgagct 420
 tgcaagcgaa cgatgggaca cagtgcacac 450

<210> 2791

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-B10

<400> 2791

ggtccggaat tccgggtcga cccacgcgtc agggcgagag tgcgtgcgtg cagccacagg 60
 caggcgtcgg caccatgtct tctttcaccg gcacgcagga caagtgcgcg gagtgcgaca 120
 agaccgtcca cttcatcgac ctcttcacgg ccgacggcgt cacctaccat aagacatgct 180
 tcaagtgcag ccaactgcaaa gggatcctct cgatgtgcag ctactcttcc atggacgggtg 240
 tgctgtactg caagaccacac ttcgagcagc tcttcaagga gaccgggagc ttctccaaga 300
 acttcacgcc aggtggcaag tcttcagaca aggggtgaact gacaagggcc cccagcaagc 360
 tatcatctgc gttttctggt actcaggata agtgtgcagc ttgccagaaa acagtgta 418

<210> 2792

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-B11

<400> 2792

ccggtccgga attccggggc gaccacgcg tcagggaaaa tggtaaatg gttaaaggctc 60
 ggaggccata ttttcttttag agaatcatgt tttaccaat ctggagattc caaaaggaag 120
 gtgaacccaa cacactatcg agaaccaagg ttttatacca aggtatttaa agagggccat 180
 tcatttgatc aagatggagg ttcgtttgaa ctttctctag tgacctgtaa atgcattggg 240

gcttatgtca aaaacaagaa gaatcaaac cagatatgct ggttatggga aaaggtaaaa 300
tcaacagaag acagagattt tcaaagattc ctggacaacg tgcaatacaa aacaagtggg 360
atattacgtt acgaacgtgt ctttggtgaa ggttttgtga gcactggtgg aatccagaca 420
acaaaagaaa ttgtgggcat gctcgatctt aaacc 455

<210> 2793
<211> 464
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-B12

<400> 2793

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gaggcaaaga agaagagagc ggcggagagc ggcgaggcgg cggaggcgaa gaagatccag 120
gacgacttct gctcgacgct gtgcgagggc aagaagggga cggacctggt cgtgtgcaag 180
gagtcctgcg cgctctccca gcagtcaca ctggtgctgt acggcaggat ccagtgcagg 240
ggcaagtgca ccgagcagaa gggcatcacg gcgccggcca tgaaggctctg ccaggaggag 300
tgcgacaagg cgtacgtggt gaaggcggcc gaggtcacca aggcctgcag cgtcacctgc 360
gccaaaggaga agaaccgcgc ctacgcgaga actgcaagag gtccctgcacc cctcctcctt 420
cttgaagcga aacccttga aatgaatgaa ccatgcatgc atgc 464

<210> 2794
<211> 483
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-018-Q1-E1-B2

<400> 2794

cgctgcang taccggtcca gaattcncgg gacgaccac gcgtccgcag agaacagcga 60
acaaggtgat aggtacatgg agttggctca ccgagttgac gaagctttgg ggttcacatgc 120
agctgctggg ctcccttttag atcacctat aatgacaaca gcagaatttt ggacgtcaca 180
tgagtgtctt cttctacctt atgagcaagc gtcactcgt gaggattcca ccacgggcct 240
ctattatgac tgctctgccc acttcctatg ggtcggagag cgcactcgcc agcttgatgg 300

tgctcacgtt gagttccttc gaggcattgc caaccctctt ggtatcaagg ttagtgacaa 360
gatggaccca gcagaacttg tgcggttgat tgatatattg aatccccgaaa acagggctgg 420
gagaataacc atcatcaciaa gaatgggacc tgaaaacatg aggggtgaaac ttccacacct 480
gat 483

<210> 2795
<211> 439
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-018-Q1-E1-B3

<400> 2795

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gaaccatgtg gtcgtcgatg cgggcacatg ttgcgatggc tgtggcggtg gtgttcttgg 120
tgagcggcgc atggtgcggt cctcccaaag tccccccagg caagaacatc acggccacct 180
atggcaagga ctggttggac gctaaagcga catggtatgg caagccgacg ggtgccggtc 240
ccgacgacaa cgggtggcggc tgcgggtaca aggacgtgaa caagcccccc ttcaatagca 300
tgggcgcgatg cggcaacatc cccatcttca aggatggtct ggggttggtgg tccgtgcttcg 360
agatcaagtg cgataagcct gtggagtgtc ccggcaagcc cgtggtggtg cacatcacgg 420
acatgaacta tgagcctat 439

<210> 2796
<211> 452
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-018-Q1-E1-B4

<400> 2796

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ggcgacggct gggcgaccgc cacttccgcc ttctcttctt actgagcgtc tccaggcacg 120
cttctgaatt cggagttgcc agcattcgct cgaggtgccg gaccagatct caccatcatg 180
caggctagcg atagattcaa cataaactct cagcttgagc atcttcaagc caaatatggt 240

ggtacagggc atgctgattt gtctagattt gaatgggctg taaacatcca gagagacagc 300
 tatgcctctt atattgggca ctatccaatg ctagcatatt ttgccattgc tgagaatgaa 360
 tcgatcggaa gagaacgtta caatttcatt cagaaaatgc tgcttccttg tggcctccct 420
 cctgagagag atgaagattg aagagctgtt gc 452

<210> 2797
 <211> 253
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-B5

<400> 2797

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 tatacatata gcacatttgt ttcggtttgt tgatgcgcgc atgcatgcta gcagacatct 120
 ttcctaaaaa aatttaaata atttccatct cgcattattt tagtagctac cattcatgtt 180
 ttctgagtag ttgtataaat gctaccaccg tcattctttt taccgggccg gaacaaacga 240
 aaaacacact atc 253

<210> 2798
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-B6

<400> 2798

ccacgcgtcc gcaagttctt ccacatgaac atgtaccggt gcaaggacat gctaatacaag 60
 gacgtgaccg tgacggcgcc cggggacagc cccaacacgg atggcatcca catgggcgac 120
 tcattccgga tcacgatcac caacaccgtc attggcgctc gcgacgactg catctccatc 180
 ggccccggga cctccaaggt gaacatcacc ggcgtgacct gcggccctgg ccacggcatc 240
 agcatcggca gcctagggcg gtacaaggac gagaaggacg tcacggacat caacgtcaag 300
 gatcgactc ttaagaagac gatgttcggc gtccgcacatc aggcgtacga ggacgccgcc 360
 tccgtgctca ccgtctccaa gatccactac gagaatatcc agatggaaga ctcaaccaac 420
 cccat 425

<210> 2799
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-B7

 <400> 2799

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 acttcgaggc cggaacaag ggcacgtgt cttctcgtg ggtggacgag tcgcgcctgc 120
 ggttcgcgcc cgaggaccgc atccgcccct tcttcgagac cctcaactac tggggcatcc 180
 agcggaagcg cacgcgcac agctgcgacg cctgcggcca cctgcttggc cacgtctacg 240
 acgacgggtcc gccggccatg cagggcaccg gccagttcgg gatggggccc agccaggtca 300
 tcccgcgcgc cccaggtac cgcttcaaga tcaaggccat cgccgccagc tcctcggcac 360
 ctgccgcgc gcctatgaa aagtgatgct ccatagattt cttcatctgg ttgcgtgtcc 420
 tgtgtgctgt cagtgtgtg gttc 444

<210> 2800
 <211> 366
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-B8

 <400> 2800

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 acgtgtcggc cgaggtgggc atgaccgtgg ccgcgttcgc gcaccacgag ctcaacgcc 120
 tcaaggacga cgacgtcctg tacaagtga tgcacacctg ctccgaggac atcgaggaag 180
 ccgtggcgca cctcagcgcc ctctctcgcg acttctccga cgccagggtc ctcgagggtca 240
 agtcttggt cacctccacg ctcgggcgca ccgccacctg cgaggacgcc tgcaatgacg 300
 caccgcgcag cgacatcaag aacgtctgca gaaccaagag cttcgagttt gagaagctgc 360
 tgcgcg 366

<210> 2801
 <211> 336

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-C1

 <400> 2801

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 agtccagtac gccaagaagt acgtgcagga ctccaagaac acgacggaca agactatggt 120
 gccgccacc gtgtaccac cgccgcaggc catggcgctc gcataccgc cgcaacaata 180
 ttgttcgccc tacgcgcggt acccgcgga gccttacggg taccctgctc cgccaccgta 240
 cgggtacaat gctgcttccc cacaaccggc gatgtacaac tacgcagcac agccggtagc 300
 tgcaccggcg aggcattggc gaggtatggg gatggg 336

<210> 2802
 <211> 501
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-C10

 <400> 2802

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 atcaagaatt ccttgtgcag gtttcagctg tctcaagatt gaagcatgag aatggtgtcc 120
 aactcgtcgg atactgcgcc gaagggagca cccgcgtcct tgcttatgag tatgcaacta 180
 ggggatcatt gcatgatatc ctccatggta aaaagggtgt caaaggagcc cagccagggc 240
 cagtcctgtc atggatgcag cgagctagga ttgccgtatg tgctgctcgg ggtctcgagt 300
 tcctccacga gaaggccgat cctcgagtgg tccaccgcga catcaagtca agcaacatac 360
 tgctctttga ccatgatgtt gcgaagatcg gggacttcga catctcaaac caggcccctg 420
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 aatatgcat gactggacag c 501

<210> 2803
 <211> 220
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-C2

<400> 2803

gggacgaccc acgcgtccgc gacgacggcg tgttgatcga gggcctcggc tcctccagct 60
gcgacgggtca cgatgggtgtt aagatttcgt gccgaaatgt gatatgtttc atgctcgatc 120
aagtaattta ttcctaattct gtgtgctgcg caaaagaaag aaaaacttcg aagtgttgcg 180
ctactcgcta gtatgaatta attcgttttt cccttttaaaa 220

<210> 2804

<211> 438

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-C3

<400> 2804

gggtagaccc acgcgtccgg gaagctaacc acgggaaagg gaggaacact gcagagctgt 60
ctgtctgctc tcttgaattct tctttttgta aagcgtacac cacgtaggca ggatgtaaca 120
acaacattca aggagttatc ttgactgaga tgcagatttt cagcagcaat gcagcatgaa 180
gtcgagctaa ctgttccaca caaactactc agcaaaaggt catgggagag gtctcaagca 240
gggtgaccct cctcctcctc ctccccctct ttttgttctg gcgattgacc cactacaaaa 300
aaaatctaaa gattgctaca gagaccggag tactgagcan atcggggagc tgttcgcccc 360
ctataaggat ctcgatgtat acacatgatg cgacctgtgt tgttaagccc aaaaaagaag 420
aaattgagag aattgtnt 438

<210> 2805

<211> 100

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-C4

<400> 2805

attcncggga cgaccacgc gtccgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaag ttctagatca cgagcggccg ctctagagga 100

<210> 2806
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-G9

 <400> 2806

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 ccgtccttct tctcgcctc cgttcgcgtc cgttcgcgtc cgttcgcgtc cgttcgcgtc 120
 ttcagggatg gagatgaaga agatcgctc cgttcgcgtc gtcgcccgtc cgttcgcgtc 180
 cgtggcgctc gccgcggagg ctccggctcc gggccccacc agcgggtcct ccgcccgtcg 240
 gccgcggctc ggcgcggccc tgggggcgc cgttcgcgtc ttcttcgcct actacattca 300
 gtgagccggc cgcggccggt cgttcgcgtc cgttcgcgtc cgttcgcgtc cgttcgcgtc 360
 gacatggctg cgcgcattcc gatgcgtggg catgtttttg attcgacaca ccttt 415

<210> 2807
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-H1

 <400> 2807

 ccacgcgtct acccagcgt ctgctaacgc gtccggatag gaacgcgaac agccgacgat 60
 cgcctcatcg ccatggcacg ctctgtcccc atcgcgcctc tgctcatgct caccctcctc 120
 ctctcctcg tctccactgc gtcagctgca cggaccgtgg gcgacaccgt gcaggacacg 180
 tgcaacatca cagtattcct caggatctgc atggacagcc tcaccgcaca gccatagagc 240
 cagaaggcta tcccgctccg gatggcataa ctgttcgtga acatcgcggc cgagaaggga 300
 tgctggattg ccacgttcgt gcacgggaag tatatcaatg ccatggacag caccgtgttc 360
 aagtgtacg acagctgctc ggatgacgtc 390

<210> 2808
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H10

<400> 2808

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 gcggagatcc cgcagtacag caagcttctg ggcggcgggt tcttcagctt ctgggtgctg 120
 gcgcactact acccgttcgc caaggggctc atgggtcgcc gcggacgcac gccgaccctc 180
 gtctacgtct gggcgggact tatctccatc accgtctccc tgctttggat caccatcagc 240
 ccgcccgcag acaggatcac ccagggcggc gtcgatgtgt gatcatccaa gcttcaccaa 300
 cgagagatta ccaaacaag aatagctgaa attttctgga cgatttgcct agtttttgta 360
 ctgaacacta tgtctactta cgcgtactaa ttaattactg accaatagtg tctat 415

<210> 2809

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H11

<400> 2809

taccggtctg agtccccggg tcgaccagcc ttcgaggac catccccggg tacacgcatt 60
 acagcgagta caagaactgg gtgtggaagt cgcaggacga cctgttcctc aacggcgcct 120
 tcttcaacca gtccggcggc cagaacgagc gcatgtacga caggctcgac ctcatccagg 180
 ccaagggcgg ccagtacgcc gagtcgctca ccatgtacgc cggcgcgctc aactgccgcg 240
 tcggcaggaa gtgctagtgc gtgtgcagct ctaggctgca gctttcatca ttggcgatcg 300
 atcgtaacaa tgcaaagttg tggtgtatat aactcttggt tttggaatgc cgcccgtaat 360
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 caacgga 427

<210> 2810

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H2

<400> 2810

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 gacggcgccg cccgccgccc gaggtgctgc gctagcgcta cggcgtgcaa gagcaagcag 120
 gcgtccaagc cgtgctgcgc gacgggtgaag ccgggtggcga cgacgaggca caggcacggg 180
 cacgggcacg ggcacgggca cgcaggcgcg gggaagcccc ggacgctagg aggcgacaag 240
 cagggtgaagg actgccatgg ttgctgccag aaggagagca agccgcccga ggacgccgtc 300
 gtgatcgcca ttccgggacg ggccgtggag caccggaagg aggccttccc tcacgagaac 360
 gcgggagccg gggggtgctg cgctgcagcg caccgtgccg aagacgaggt atgcattgtc 420
 atcagccgc 429

<210> 2811
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H4

<400> 2811

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 gagcggctgc cgcacctgcc gctgcggatg caggagcact cgcgccgcgc gctggcgctt 120
 gccgagcgga tgcagggggt gggcctgcgc gtgctgtacc cgggcctccc gggccacccg 180
 caccacgcgc gcctggccgc catgggcaac ccgggctacg gctgcggcgg catgctgtgc 240
 ctcgacatgg gcaccgagga gcgcgccaac cgcctcatgc accacctcca gaacaccacc 300
 cagttcggcc tcatggccgt cagcctcggc tactacgaga cgctcatgtc ctgctccggg 360
 cagcagcaca gcagcgagat gccgcccag gaacgcgcgc gcgcgggcat ctccccgggg 420
 cctcgtccgc atg 433

<210> 2812
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H5

<400> 2812

ccacgcgtcc gaggtcccc aaagatagca tagcagcagc actcacaata gcaaaaacca 60

ccatccgtcg tcgccaaccg tagcaaggag ccaaggacat caccaccgcc cagcaataat 120
 ggcgcagagc atgaggattg tggcgctggc cttggtggcc ctgctggtgg tggcggcggc 180
 ggcgcccgtg gccaccgctg acggctgcta cgactactgc tacgagcgct gcgccaacgg 240
 caagaaagac cccgcctgca ccaagatgtg caaccaggcg tgcggctcca cggaccacgg 300
 cgccggtgcc gccggcgccg cgccggcttg atcgccagc gcattcatcg cttcagctcg 360
 atataatcgc tgctccgtca gcaaccaca tatgattcga ttaatccttc tcctctaa 418

<210> 2813
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H7

<400> 2813

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 tgaccggcgt ccgcgccggg gactggccgt gtcctctccg agaccgagcg tcgcgcgcct 120
 atgccgccgg ccggacctgc gctgcgccc gcaccgtgcc gccgccgagc gcggtcgtgc 180
 cgaggagcgc tcgcgcctg tccacgccgg ctgggccgtg gccgagccac caggatcgct 240
 ccagccgagg agccgcgccc gtggaggacc gccgtggtcc gtcggggctc gccgaggccg 300
 accggccggt ggccagccgc gccggggcca gcccgccca cgagccggtg gccagcccg 360
 cccgcgcgcc ggtggctgga tgcgccaggc tgctgcggcc agcg 404

<210> 2814
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H8

<400> 2814

ccacgcgtcc gctaattttc atttcaagga agacaactgt gtaattaaga gaaggaacgg 60
 gacaagatgt tctttcagag gaagaaatca aagaaagcca aagactccag aggatcgcag 120
 aagaagggga aagatgggcg tgggaagaat gatcttttcg atcgtgccaa gggagggctt 180
 gatgccctcg caggaagcct gcaggaagcc aagaaggacg ccgaaacggc gactgagaag 240

cttcaagggg atgtgaagtc gggcatggaa acgatccggc acaagggctc aggcctcctt 300
gagaaagcca aagaagaact cgggagtcac tccgacgcca gccgttcctc aaaggaacta 360
gagcgaggaa gcgaggaaca ggggaacaac aaggacatgg acgctttcag tgc 413

<210> 2815
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-H9

<400> 2815

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gcggctgagg ccacgtacaa gcatgacctg gtcgaggtcg ccaaccaact taaccgtgca 120
gtccacagat ccgtcgagaa ggaggacatt ggcacgaggc gggagatgat ggggacgacg 180
acgaggaagt ctaagttcag cgggccgtgc agggcgacga acccgatcga ccggtgctgg 240
cggtgccggc aggactgggc gacggaccgg aagcgcttgg cgcggtgctc caaggggttc 300
gggcgcaaca ccaccggcgg gctggccggc aagttctacg tggtagcgga cggcaccgac 360
gacgacgtgg tgaaccgcg ccccggcacg ctccggtggg gcgtcatcca gatcg 415

<210> 2816
<211> 400
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-A10

<400> 2816

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tgttgtccaa ctgcgcgat actgcgccga agggagcacc cgcgtccttg cttatgagta 120
tgcaactagg ggatcattgc atgatatact ccatggtaaa aagggtgtca aaggagccca 180
gccagggcca gtcctgtcat ggatgcagcg agctaggatt gccgtatgtg ctgctcgggg 240
tctcgagttc ctccacgaga aggccgatcc tcgagtggc caccgcgaca tcaagtcaag 300
caacatactg ctctttgacc atgatgttgc gaagatcggg gacttcgaca tctcaaacca 360
agccccctga aaatgctgcg cggcctcaac tctactcgcg 400

<210> 2817
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-A11

 <400> 2817

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 aaggcgcgac ggtggagatg gaggcgccg acttcgagtc gcagcaggtc caccgacaagg 120
 cggaggcgac gacggggccc ggccggctggt acaggatgga gatcagcggc gaccaccagg 180
 acgagatctg cgacgtgcgc ctgctcaaga gccccgaggc ggactgcgcc gagatcgacc 240
 actcccgca cgcgtgcgc gtcccgctca cccgcaacga cggcatcaag cagagcggcg 300
 tccgctacgc caaccccatc gccttctctc gcaaggagcc gctccccaac tgcggcgagc 360
 tgctccgcgc ct 372

<210> 2818
 <211> 424
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-A12

 <400> 2818

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 tgctggtcgc cgtgctagcg gtggccgccg atgtcgccaa cgccggccac gccaaagcccc 120
 tgacgcctgg cgggctgtg gtacacgaca accacggcaa gttcacggcc gggccgtgga 180
 aacccgccc cgcgaccttc tacggcgggc gggacgggtc cggcaccacg gcgggcgcgt 240
 gcgggtacaa ggacacgcgc acgcaggggt acggcgtgca gacggtggcc gtgagcacgg 300
 tgctgttcgg tgacggcacg gcctgcggcg ggtgctacga ggtgcggtgc gtggacagcc 360
 ctagcgggtg caagcccac gcggcggcac tgggtgtgac ggtgacggac ctgtgccccg 420
 ccaa 424

<210> 2819
 <211> 239
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-A5

<400> 2819

ttcgcggggc gacccacgcg tccgtttgaa ttcccttcga ttcattccggc acagcgggct 60
atggaccttc agcagcaagc taattaagtt ggcagcatgc accgctaacc ttatatacta 120
ctgagacttc caaattctag tatatgtaat ccttttgttc gggttcatga tcgaattcca 180
aagagtggaa aacaagcaaa aggttaaata tacatgccat ttttggaggc atttttaaa 239

<210> 2820

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-A6

<400> 2820

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tcaccggggc gggctcagca tcttttcgaa gaagtaacac ttctccgtga ggctgagcc 120
cctcgccgcg gtgagccaag cgggcgcacg tcgccccggg gctcacgctc accaccgagc 180
cccaaccaat taataatatg tatatacagc taggatcgat cgtcagtaaa atggcaggct 240
ccgccgtcct gaggagcccc ctgtccgtcc tctctacat cctcgccgcc gtgcccccca 300
ccgccgcggc gacaccgacc gacgccgcca tcgacaaggc gtacgcacat ctcgtcaacc 360
tcacggccaa gcactagtac tgggcggagc gcg 393

<210> 2821

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-A7

<400> 2821

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catggcatca tcggccgcgc tcttggtgct agccctcgcg ctagtggcgg ccaccgcccc 120
acaggtagcg gaggcaaaga agaagagagc ggcggagagc ggcgaggcgg cggaggcgaa 180

gaagatccag gacgacttct gctcgacgct gtgcgagggc aagaagggga cggacctggt 240
 cgtgtgcaag gagtectgcg cgctctccca gcagtccaac ctggtgctgt acggcaggat 300
 ccagtgaag ggcaagtga ccgagcagaa gggcatcacg gcgccggcca tgaaggtctg 360
 ccaggaggag tgcgacaagg cgtacgtggt gaaggcggcc gaagtcacca aggcctgcag 420
 cgtc 424

<210> 2822
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-A8

<400> 2822

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 gcgcaccgac gttgacacct gcgaccaggg cttegaggag cgcgaggagc tcacgccgct 120
 catggctaag caggacgcgg agctcgccaa gctctccagc aactgcctcg ccattgccac 180
 cgctgccggc ttgcgctaga cccctatgt atcggttcggt catccatagc tgtgcatgtg 240
 ctagctccta ggcagcagca acaacatata ctgcccctat aattaactct ccacgcacatca 300
 gagaagcttc actcatgcaa cacacttgta attgtatatc gaggaagaag atgtagttag 360
 tgcaatcggt ccggttct 378

<210> 2823
 <211> 416
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-023-Q1-E1-B1

<400> 2823

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 ccgcacaagc cgccgaatga gatcctggga tccccctgcg acatcctcct ccacgcgcca 120
 tggccgcccc cgacgtcctc gcgtgccgct ccccgagggtg gcgggcatgg tgcgcgcagc 180
 tatcgcgggg gtcacgacgg cgacgcgatt ccaggagctg gtagactgga tggaggagcg 240
 gaaggcggca ttcanggacg acggcaagtg gacagagacg gtgaatctgg ggctcaggag 300

ccccgcgctc atcatgttcg ggctgcttca gttcgccatc gacagggacc tcgggttcgg 360
gaagaccagc ctcgtgctgc cctgngtgcg ccatggccgg ctgggggtccg cgtccg 416

<210> 2824
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-B10

<400> 2824

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agatgctatt agtgagtcca taagtacttt gaagttcgcc gagcgtgttt ccactattga 120
gcttgagca gccaagtcaa gcaaggaagg aggaggagga ggaggaggag aagccagaga 180
gctcaaagaa cagattgctt gcctcagggc agcattagct aggaaagatg gagatcatga 240
gagcatacga agcactcaat cgagcccaga catatataga atgggaacgg gtaatgcac 300
acctgcgtcc aggcacccaa tagaagatgg gatcatagag aacgactcag cattgggaga 360
tttggtgaa cactcacagt tcgggagcag caattcc 397

<210> 2825
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-B11

<400> 2825

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ttgccgagtc cgggtggggcc tccagcgtcg tgctcaagga cgggatgacg cgagccccgg 120
ccgtccggtt cccatctgca cgccgcgccg ccgagctcaa ggcctttttg gaggaccag 180
cgaactttga caccctggct atggtgttta acaggtcgag cagatttga aggctgcagg 240
gagtgaagtg tgcgattgca gggaggaacc ttacatgag gttcagctgc agcacagggg 300
atgccatggg gatgaacatg gtctccaaag gtgtacagaa cgtgctggac tacctccagg 360
ctgacttccc tgatatggat gtcacagca tacc 394

<210> 2826
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-023-Q1-E1-B12

 <400> 2826

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 accctgagca aatcccttcc tggcttggtg actggattcc tgagaaagga ggttacctta 120
 tagggaatct gcagccagct cacatggatt ttaggttctt ctctcttggc aacctttggg 180
 ccatagcttc gtctctaact actccaaaac aagctgaggg aattcttagc cttattgaag 240
 aaaaatggga tgatcttgta gcaaacaatgc ccctgaagat atgcttcctt gcaatggaag 300
 atgatgaatg gcgcattatt actggcagtg attctacnaa tgacccatgg tcatatcat 359

<210> 2827
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-023-Q1-E1-B2

 <400> 2827

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 gctttggagt tgtgtgctg gagcttttaa ccggctgcaa gccagttgac cacacactgc 120
 cccgtggcca gcagagcctt gtgacatggg ctacaccgag gcttagtgaa gacaagggtga 180
 ggcaatgcgt cgatccaagg ctccggagacg aataccctcc aaaggctgta gccaagatgg 240
 ctgctgtggc cgccctctgc gtgcaatacg aggggtgaatt ccgtcccaac atgagcatcg 300
 tcgtcaaggc tctgaacccc ttgctgcaca gccggtctgg caaccgccct actgcctcgt 360
 cggcctccca cgctgccgag cgatccggac tgtgatttct catcgctgcg acaactttgg 420
 ggtcacgana aaggac 436

<210> 2828
 <211> 413
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-023-Q1-E1-B3

<400> 2828

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 cacagatatt aaggaaaggt cccgcccttt tctcccgaca tccataaggg gggaggggaa 120
 aatacgtaca ttcacccggc tgcaataatg gactcgggtc cggctccggc gacgactacc 180
 gcagccgtca tcttatgcgt atgcgtcgtc ctctcctgtg ccgcagctga ctacccgagc 240
 ctctccgact acgtcatcca tggccgcgtg tactgcgaca cctgccgcgc cgggttcgtg 300
 accaacgtca ccgagtacat cgctggcgcc aaggtagggc tggagtgcaa gcacttcggc 360
 accggcaagc tcgagcgcgc catcgacagg gtcaccgaca cgaccggcaa cta 413

<210> 2829
 <211> 245
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-B6

<400> 2829

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 cacctctcca acatgaaggt caacaccaag atcaagctgg agccgggtcat ggcgccgtcg 120
 tcgtccgggc cgcggagcgc cagcgagcta gcagagccgc cgtcagcgta cagctccagc 180
 acggcgcacc accccgtcga cgtgcggacc acacggaggt tgtccgtagc gcgctcgtcg 240
 ttcgg 245

<210> 2830
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-B7

<400> 2830

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caccggcatc cgctgcacat atttggggag tggtagtgt acaatccggc cacgtccgag 180
 ggcttcatcg tcatattcaa caacgccagc tactacaaga agaccaccac cggccctgag 240
 gctgggaacg cgcgcacagg cattccgccg gtcttcagga acagcggccg cgacggcggg 300
 tacaggcccc acttcggcga cggcaaccag tacacgcagc ccacactgaa gaagttggcc 360
 ttctgtgggt gctgaatc 378

<210> 2831
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-B8

<400> 2831

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 tctacggaac ctggtgtgct tcatgcaggg ctctctttcc aaggctctgc cggacagctt 180
 tggagaacct tgatatattg tttctaaaag tgaattttga tgaaaacaaa cctatgtgca 240
 aacgactgaa tgtcaaagtc ctctctttct tccattttta tcgtggagct gacgggctac 300
 ttgaggcttt ctctgttcc ttagetaagt ttcagaagct gaaggatgcc attgcaatgc 360
 acaacactgc tcgttgcagc attgggtccac ctgttggagt ttgcgaatgt tgacttgctg 420
 gataacgcga gccctc 436

<210> 2832
 <211> 99
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-B9

<400> 2832

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 actactcaca cctgatcatt gtcaagtttt tacttgctg 99

<210> 2833
 <211> 387
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C1

<400> 2833

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ggggccggtt cctctcggcg ggccctgcgc ctttctccgt ccgcctcccc tcgcccggcg 180

gcaccagcac cgctgtccac ctctgggcgc cgccgcggtc cgcgcggcgg cccgtgctcc 240

tctccacagg cttcggcgcg tcggcgacgt ggagtgggc cccgtacctc cgcagcctcc 300

tcgcggcggc cctcgacccc atcgctcccg acctctctt cttcggcgcc tctcgtcca 360

cggtccccga ccgtccgac accttcc 387

<210> 2834

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C10

<400> 2834

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tgtcatcccc aatgtcatca ccgcccagtt ccgcaccttc atcgagatcg tcttcgagaa 120

ccccgagaag agcatagact cctccacgt cgatggctac gccttcttcg gcgtcgggat 180

gggccccggg aagtggctgc cggagggtgag gaagacgtac aacctgctgg acacgggtgag 240

ccggcacacg atccagggtg acccgcggtc atggacggca atcatgctga cgttcgacaa 300

cgcgggcatg tggagcgtgc attccaacat ctgggagcgg tactacctcg gggagcagtt 360

ctacatcagc gtcgtctcgc cggcgcgatc actgcgcgac gagtacaaca tgcccgacaa 420

cggcctccg 429

<210> 2835

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C12

<400> 2835

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ctctccgtgt ttccctctta ctctcaaat gtagctctaa ctgtaacata atgttcctta 180
aatagatata aattgtcatc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaggggggg cccccaaaaa ggttcaaagc ttacttacc ttgaatgcaa 360
gttcaaagcc cttcaaaagg tgcccaa 388

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<210> 2836
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C2

<400> 2836

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ccctcagcgc ggccgaggca cgggcagagt caccgaaggc aggcagtcct gccaaggcac 180
cggccgagtc accgaaggca ggcagtcctg cagctcctgc caaggcacc gagtctgctg 240
ccacgagaac tgcccccgct aaggcacctc aagccgctc ccccccgcc gctgccgctg 300
ccccatcgtc gtcgtcgtct aagaagtctg gtccagctgc cgcgccgacc accgccgcct 360
ctacaccgtc t 371

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<210> 2837
 <211> 391
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C5

<400> 2837

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atcgtcgtcg aggaaatttc aagccccata gctgcacata tactcgactt ctactacggc 180
gacgacggcc tgggcatga cctctttgcc gcggtgactg ccacctctgg cccattccct 240
gccactgacg atgatgtttc ttcgtctacc gctaccaccc ctcttatctg cggctacagt 300
gaagacaccg cagctgctgg tggagccaca gcctacaccc cgttgacatc cttcgacacc 360
actctcacag cctcctgga ggaagagcag c 391

<210> 2838
<211> 264
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C6

<400> 2838

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tcatctgcct caggagctat tattgtatgt gaccgtttgc gtgtcgcaaa tgttgctgag 120
gcaacagccg tgattttctat tggaggacaa gggattgcgg tttcaacgga ttagaaagct 180
gatcagacag attatacaca gagatctgag caggcatgag ggccagctct gtggcctgag 240
atatggcgac tgggtggtgt tctt 264

<210> 2839
<211> 260
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C7

<400> 2839

ccacgcgtcc gtttgaattc ccttcgattc atccggcaca gcgggctatg gaccttcagc 60
agcaagctaa ttaagttggc agcatgcacc gctaacctta tatactactg agacttccaa 120
attctagtat atgtaatcct tttgttcggg ttcatgatcg aattccaaag agtggaaaac 180
aagcagaagg ttagatatac atgccatttt tggaggcatt tttaaaaaaa gcaaaacaaa 240
agggcgggcg ctctagagga 260

<210> 2840
<211> 381
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C8

<400> 2840

taccggacat gaaattcccc ggccgaccca cgcgtccggc atgatgcgtc gccgagccat 60

gacgatgaca atagccgccg tgctctgcct gctcctcttc tctggccgtc acgccgcggc 120

ggagaagact ttccgcggag gctgaggcgg aggctacagc gggttggatg ccggtggctg 180

aggctgcggc tgcagctact ccaccccgag cgaggcatcg ccatccacgc ctgccgctgg 240

ggagactact accccttcgt caggcgggcg ttactccacc cctagcgagg cagcgccatc 300

cacgcctgcc gctgaggaga cgaccactac tccttcgtca ggcgggcggg gttacggccg 360

tgcaaccagc aaggcttcat c 381

<210> 2841

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-C9

<400> 2841

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ccttcagtgg ttcagccatc acaattggag ccacctctct agaccgtctc cgacagttta 180

ctcacccttc ttagtcgatt gttatttaag tgcagtctct tcggagatgc aattacagtc 240

catcctctct ttcttttccc ctttctcaaa gagctaggac cttgctcgac tgagcatcag 300

gctgtagggc tctttgtgat catcttttgc cagttttctt cttgtagcag aagttgttgg 360

gcatggaact cctgttcctt tcaccaatag aagcataatg atcagcactg tgaaacaatt 420

tttcc 425

<210> 2842

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D1

<400> 2842

acggtcaaga gttccccgggt cgacccacgc gtccgtggag attttacaat atcatggcta 60

ccgttttact cagaagcaaa ggtgttggtt tttgtatatt tgtggtaccc taagacaaag 120

ggaactacgt atgtttatgg aactttcttt aagccatata tttctcagca tgagaatgaa 180

atcgaccgaa atctttcttga gctcagagct cgagccaccg atatggttgt cctttacttc 240

cataaggctg ctteggtagg gcaaaatact ttctttgacg ttttaaaata tgttgctgcc 300

cagtccccct ctcggaaatc aaggctgcac cctcatcagg tttggtcgaa tgtattctct 360

tttttgtcca aaaaaaacc attgaataat ttgttgtaa gtgttcacga tgtttacaca 420

gataactcaa acctttttta aaggtc 446

<210> 2843

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D10

<400> 2843

ccacgcgtcc gtctgaatct gatgcccggt aattcgccaa ttttctttgc cctttactcg 60

actttgcacc agagaagagg ccaacagctt tagattgcct aaagcatcca tggcttaaac 120

atgacgagga taaaacatgt ggggtctctta acaataatga tgccaagagc attgatctgg 180

tccaaagcac agggagtatc accaccgttg actgtacaaa tattgatttg acgagcaaaa 240

aaggcagctc cactggaact tgtgataaga ctgttgatgc aaaatacaac acaagaagca 300

ttaccagcaa tgctaccatg aacacttatg tacaaccac ttctggaagt ttgccaaca 360

gacttgcgaa aaatgttgat gtaaaccga acat 394

<210> 2844

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D11

<400> 2844

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gaataagacg gtcctcatcg tcgcgccgat gcttctcatc acgctcgtgc tggaggccgc 120
ccctccggcg accgccatgg actgcaagge cgggtgtgac gaggtcacgg gccactcca 180
catgagcatg gaggactgca tgaagaggtg caaggagatc gctgctaagc aggggcctag 240
ggacccttac aaggataaca aacttgacat cccatgaact agttaatgct cctatatcat 300
ctgcctatcc atgcatgcat tgcattgcgt atgcacactg tgcgtgcctg cccacaaagt 360
tcgacaacac accgatctcg atggatttgt aatcgtgtcc act 403

<210> 2845

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D5

<400> 2845

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tgccgcctgg tgcccagacca gaagctgttc ccggaccgct tcaagatccc ctcgtacctg 120
ggccgcccct ggaaggagtt ctgcgcctc gtcacatgg agagcaccat cgccgacttc 180
gtcaagccag aggggtacat gccctggaac ggcgacttcg ccctcaagac gctctactac 240
gccgagtaca acaaccgcg gcccggcgcc ggcaccagca agagggtcaa ctggcccggc 300
ttccacgtca tcggacggaa ggaggccgag ccgttcaccg ccgggccggt catcgacggc 360
gccatgtggc tcaagtacac cggcgcgccg cacata 396

<210> 2846

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D6

<400> 2846

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acaaagcagc ggtgaagggg ggggaggaaa ggaaacagca accacatgcg attatttctt 120
ggggattccg cccctccgac ctatctaagc ggaccataac cacgggcagc aggacattat 180
attcttctgc ctgcccttcc gttcaatttc aatttcactt tccttctctc ctctctctct 240

gctgctacta ggttcggggcc gtccgtcctt gctcttgatc tgcattatctt aattcggacc 300
 attccccgc cgtcctcccg cccgcctgcc ggagatggag atggacaacg ggcacgcaa 360
 gtaccgggtg gccgtcattg gcaacggg 388

<210> 2847
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D7

<400> 2847

ccacgcgtcc ggccgcccc cctctccgcc tcaaggctct cctctcggag gtctgatagg 60
 caaccaata atggcagaag tcctatcagg atctcatgaa caccgtctaa gctctgcctt 120
 agatggacac tacgacgaga agaggaaatc caatgtggaa tacacagagg acgagaagaa 180
 agccgtgatc gcggctctga aaaagaaggc tttgagcgcc tcacagaagt ttaggcattc 240
 catgaagagg gggaggaaga gcagcaagggt gatgtccatc tcgattctgg atgagcgtga 300
 acctgaggag gtgcaggctg tggatgcctt ccgccagctt cttgtacttg aagagctgct 360
 accatcgcag catgatgact accacatgat gctaag 396

<210> 2848
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-D8

<400> 2848

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 tctgcatcgt gcatggtgag aaggaagagt caaagggcat cgatgcgaaa gcgtccgggc 120
 ctggtggggtc cttcgacatc accaagttgg gcgcctccgg caatggcaag acagacagca 180
 cgaaggctgt gcaggaggca tgggcatcgg cgtgcggcgg cactgggaag cagacaatcc 240
 tcatacccaa gggcgacttc cttgtcggac aactcaactt cacaggccct tgcaagggcg 300
 acgtgaccat ccaagtggat ggcaatctgc tggcgaccac ggacctaagc cagtacaagg 360
 accatggtaa ttg 373

<210> 2849
 <211> 335
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-D9

 <400> 2849

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 gccccctcct tttccccctcc ctcccacacg caccgcgcgcg tccgccccct tcgctgcccc 120
 tgccccggtcg gttccgatgg ggtacgtgct gtcggcggtg gcgagggtgc tggagcagcc 180
 cacggcggtg ggggcggccc gggagatggc gctcctcgcg gggccgctct gggcggcggt 240
 cctcctcggg ctctgctcg gctgggcctg gcgcccgcgc tgggcagctg gactcgtcgc 300
 cgcccccgcg cccgcagccg ccgcgcaacc gccct 335

<210> 2850
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-E1

 <400> 2850

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 ttcccatccc atggcgggcg gcgacctcac gcctcctcct cctcctcccg aagagacgcc 120
 gccggcagcg gcggccgagg acctgatcga gatcgtggag gaagggtcgg ggcggctgga 180
 catcgcgcg tacgtggacc acgtgcgcga cctgtcggcg ggcgccatcg cgacgttcga 240
 tggcacgacg cgggaccact tcgcggggcg gcgcgtggtg gagtccggt acgatgcgta 300
 cgcggccatg gcgcggcgcc gcctggctgt catactgctg gaggccccgt cgctgcacgc 360
 gcagctgctg ctggccgtgg agca 384

<210> 2851
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-E11

<400> 2851

ccacgcgtcc gcacaaacag atcgatcgat tacagcaatg gcggccaagg tggtcctcct 60

cctccgactc agcatgggtcg ccgtcgctcct ggctgccatc gccacagtag cgctcgcgga 120

ggaagccgat ccgcggggcac tgccggcaca gtggaccacc gcgaagaagt acaaggccac 180

gatggacgcc aagacgcggc aggttttcga cggcgtgggtg gccgccgcta cggcagagaa 240

gcggtcccag gcggtggagg ccgtgctgca gcagcagctg aacatggacg tgtccctgtc 300

caaggcgacg tcttccgggg acgagaacaa ctacgtgagc gtggccgccg cctacgagaa 360

ggccgcgggc gccgtcatcg ccgcgacg 388

<210> 2852

<211> 365

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-023-Q1-E1-E12

<400> 2852

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taaaaaggag agagagagag atggctctgt cgtctcgccg tatggccgcc gcaccattct 120

tcgtcgtcgt ccttctcgtc ctctgtggcgg cagagaggac gatgggcagg gtggtggtgg 180

aagagacgct ctgcttgctg cagagccatg ccttcaaagg cgtgtgcctc agcaacacca 240

actgcgacaa cgtatgcaag acggagaagt tcacaggcgg cgagtgcaag atggacggcg 300

tcatgcgcaa gtgctactgc aagaaggtct gctanggcac gaccggcagc aagccccagc 360

cgtac 365

<210> 2853

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-E2

<400> 2853

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atcgggcagg gcacgtacag cagcgtgttc cgggcgcggg agctggccac gggcctgctg 120

gtgtcgtca tcaatgtgca gttcgacatt gtgcacctcc agaacttgca gttcatggag 180
caggaaagtt gtaaccgccg catcctcagt ggcttgccga agctcgtcga actcgaaggc 240
atcaatacct cccgctcctc tccctccatc taactcatct tcgaatacct ctagcacgac 300
ctggtcggcc tcaactcctc atccgatatc atcttcaccg agccccagat caagtgtac 360
atgcgacagc tgctggtagg ggctggcgca ctgcaatgca cgcggtgtga tgcaccggga 420
catcatttgc gccaacctg 439

<210> 2854
<211> 371
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-023-Q1-E1-E4
<400> 2854

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aggaattgcc tccaatggc aaggagcccg gcaacaatgc gccgtcaagc gcaaccaacc 120
agagggttgc ggcggccaaag cagtacatcg agaaacta caaggagcag atgaagcatc 180
tgcaggacag gaaagaaaga cgggtgtagtc tagaaaagaa actagcggac gctgatgtgt 240
ccgaagagga ggtcaacaac atcctgaagc agttcgagaa gaaagagacg gagtacctgc 300
ggttgcaaag gcacaaaatg agcgtcgagg atttcgagct gctaacaatg atagggaagg 360
gagcttttgg c 371

<210> 2855
<211> 373
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-023-Q1-E1-E6
<400> 2855

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cggctccctt ctggccgtgg ccatcgcgct gttcctgtcc gtgtccctcg gcgtgcgcgc 120
cgccggcgcc ggcgccggcg ttgacatcaa ggtgtcgtgt gcagcgacgc cggacccgga 180
cgtgtgcctg cgcgcgtcc aggcggacag cgactccaag accccgcggg acctggcgga 240

ggcggcgctc cgcgcgggcga cgaccgcggg cggcgcgggcg ggcgactacg cgcgggcacga 300
 gatggacgtg gtgaaggaca acgacatgtg gcagtgcctg aacgagtgcg ccgggggagat 360
 cgaggaggcg ctg 373

<210> 2856
 <211> 437
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-023-Q1-E1-E7

<400> 2856

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 gtgctgtgga gttccttggg gatgaaaact atgatgtttc atgcaattgc atgttcagct 120
 tttgttgaa ttgcactgag gaagctcatc gaccagtga ctgtgagact gtttctaagt 180
 ggatattaaa aaacagtga gaatctgaaa acatgaactg gatactggct aattctaagc 240
 cctgtccaaa gtgcaaacgg ccaatagaga aaaaccaggg atgcatgcat atgacatgca 300
 cccctccttg taaattcgaa ttttgctggg tatgtctggg tgcattggca gatcatggag 360
 agagaacagg tggcttttat gcttgcaatc gttaagaatc aagcanagaa ggaggaattt 420
 tacgacaaga ctgatgc 437

<210> 2857
 <211> 324
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-G10

<400> 2857

ttcccggggc aaccacgcg tccatgctgg gatcaaacga cctgaacaag tacacggcga 60
 gctggatcga attgtctcac gttaacaaca tcgggatcac cggctcgggc acgctggacg 120
 gccaggggac cgccgtttat agcaagagca agaccgacaa cgtgaaggcg atgcccacaa 180
 cactggtgct gtttcacgtg atcaacgcca ctgtcgccgg aatcaaacta ctcaactcca 240
 agttcttcca catcaacatc gacaactcag agagcatcac cgtgaaggac gtgaacgtca 300

ccgcgccccg cgacgttgag aaca

324

<210> 2858

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-G5

<400> 2858

ccacgcgtcc accacgcgtc cgcccacgcg tccggttgtc acccaccat cgaggttggg 60
gccgccagca ggttcagccg ttcctgttct tgataaacg agagaaggat ggcagtgttt 120
cagggagctg tctattctt gtttctctc ctctcgcag cagaggtggg aaccatcgat 180
gccaaaatgg gagtagccat gcccatgcat gccttgataa tggagaaagc gaaacagcag 240
gagacggaga agaaggagga gaaaagcacg gagaaggaag agagtcaatg cttatcgccg 300
agtctccagt tcgagggtt ctgcttcaac agcgacagat gcgccgaggt gtgcatgaag 360
gagagctttc ccggtggcga gtgcaagcgg gacgtggcca tgcgca 406

<210> 2859

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-G6

<400> 2859

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ccacctttct cttttcttg ccacggcaaa acaccttcgc cggcgagagc atggcgatgg 120
cgtaccgtgt cctggaggtc accctggtgt cggcaaatga cctcaagaaa gtgtcgctct 180
tctcccggac tcgcatctac gccgtggctt ccatctccgg attcgacctc cgcacctt 240
cccacagcac ccaagcagac cacagcaacg gctgcaaccc ctgctggaac gccgtggtac 300
acttcccat cccggctgcc gctgacaccc gcggcctcgc actccacgtg aggctccgcg 360
cccagcgtct atacctgggc gatcgcgaca tcggcgaggt gtttgtgcc atcgacgacc 420
tcctggccgg cgccgacaag ggtggcgat 449

<210> 2860

<211> 458
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-G7

 <400> 2860

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 cacgcgtccg cccacgcgtc cggcaaggga gagaaaggaa ggagggcagg aggagaggcg 120
 gaacaacccg tctccctcca tctctctacc ttcttctcct gcgcccctat ccatcgctcg 180
 caccacccac tgaccggccg gcggcctcct tattaccata acatcacggg acggtggcgc 240
 gatgcaagga ggcccactga gcccgatga gtactgggtg atatcgccgc cggcgctgct 300
 gcaccagccg gcgtccacca tcgtcgtggc catcgaccgg gaccggaaca gccaaactggc 360
 cgtgaagtgg gtggtggacc acctcctctc cggcgctctc catatcgctc tgctccacgt 420
 ggccgtccca ttacacacga cccaatggtt cccatggt 458

<210> 2861
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-G9

 <400> 2861

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 ccaacatata cggccagccc aacgaaaatg tcgcgcgcca cagctgcggt cctcttctac 120
 atccgtcgcc gtcggggccc tcagcgcggc cgaggcaccg gcagagtcac cgaaggcagg 180
 cagtctgcc aaggcaccgg ccgagtcacc gaaggcaggc agtcctgcag ctctgcca 240
 ggcacccgag tctgtgcca cgagaactgc ccccgctaag gcacctcaag ccgcctccac 300
 cccgcgcgt gccgtgctc catcgtcgtc gtcgtctacg aagtctggc cagctgccgc 360
 gccgaccacc gccggtctta caccgtcttc ttccacggac gaggagtta gcccttcgcc 420
 gtcgg 425

<210> 2862
 <211> 384
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-H1

<400> 2862

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cgcacggtcc ccgtcccaat ggcccagact ctgtccgccg cctcggagct ggccaccctg 120

aagcgcccgt tcggcaacga cgggttcggc gatggcagca acaacggcag cgcgaccggc 180

gagaagccca aggcgcggcg gcgggaggcg gaccggcgcg cggcgatggc cgcggcgcgg 240

cacgagttcg gcgagcacgg cggcgtgaac atgtccatcg aggcgtcggc gacgttcacg 300

gtgatggagc cggacacgat gcggcggtcg ttcgcggggc agctggggccc cgaccgcggc 360

gacatgtaca tctacagccg gcac 384

<210> 2863

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-H11

<400> 2863

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tttttttttt tttttttttt tgatttccag attgccctcc tttcttaaca ctaatttgca 120

ccatttacag aatcagcttt agcttacagg gactaaccaa gtctgaaaaa tatcagttaa 180

tgatgcaaag ccagcatcga tgcatacataa acgatgactg aatgagccat gcgtgtgtgt 240

ttttataagc tgagacgtag taaaatgtag aagatcccat acagcgctgc ctgatcaggg 300

ttgggagctt gcatctgaag tggcagcagg aggcggcgaa ggcttgcttc tttggcggct 360

gaacaagttg tgcttgtgcc aagcggcagc gacgatcgac aagccactga accta 415

<210> 2864

<211> 68

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-011-Q1-E1-H12

<400> 2864

attcncgggc cgacccacgc gtccaccac gcgtccgggt ctagatcgcg agcggccgct 60
ctagagga 68

<210> 2865
<211> 435
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-011-Q1-E1-H3

<400> 2865

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gaagaagatc gcctgcgccg tctcgtcgc cgctcggcc accgtggcg tggccgcgga 180
ggcgccggct ccgtctccca ccagcggctc ctcccggtc gcaccgccca tcgtcggggc 240
cgccgtggcc tctttcttcg cgtactacat tctactgagc gccggacgag gagccggagc 300
cggaggggaag agaccaaggt ggggggagag acttggtgc gctgcgtgc tctgctgctc 360
ncgcgcattc ccgatgcgtg ggcgtgctct gattgggcac ggcggtggca gtggcacacc 420
ttcgtcttcc ttttg 435

<210> 2866
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-011-Q1-E1-H5

<400> 2866

ccacgcgtcc acggaggatt ccgatgattt cgaggttgca actaattgct cgtagagct 60
ggactgcgtg aggccatcta gtgccccaaa agcttcaggt ttatcaaatg gagggggcac 120
agctgtaaaa aagatccaag tcaagggttc aaaagggtca gacgttaggg gagtgaatcc 180
tggaanaagg tcatcgccat tacagaagaa gccgagtga ccctcaccga cgctaatcaa 240
gaagggcgga ggtgaaggaa ggaagactcc aaatggtaaa acaggaacca agaagtaagc 300
aatccagatg aaacttgggt ttgctgtgac caacttcacc ttggttaggg acagataaac 360

<210> 2867
 <211> 455
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-011-Q1-E1-H7

 <400> 2867

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 accgtacgtc ctccaccgcg tcgcccggcg ccggcctctg cccagcccgg gctgcctgcg 120
 agggcttctg atggccctcg acgcccgtct ttctctctag tgcccagctt tattgcagat 180
 ccagccctct gatcctcgtc ttctttcacc tctccaacat gaagggtcaac accaagatca 240
 agctggagcc ggtcatggcg ccgtcgtcgt ccctgccgcg gagcgccagc gagctacccg 300
 acccgccgtc accgttcagc tccaacacgg cgcaccaccc cgtctccgtg cccaccacac 360
 ctaggttgtc cttatcgtgc tcgtcgttcg gccacatggt gaccccgccc accgacacac 420
 cgccgatcac gcccnacaag aagcaggacg acaag 455

<210> 2868
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-011-Q1-E1-H9

 <400> 2868

ccacgcgtcc aagggtcccc aaagatagca tagcagcagc actcacaata gcaaaaacca 60
 ccatccgtcg tcgcccaaccg tagcaaggag ccaaggacat caccaccgcc cagcaataat 120
 ggcgagagc atgaggattg tggcgctggc cttggtggcc ctgctggtgg tggcgggcggc 180
 ggcgcccgtg gccaccgctg acggctgcta cgacgactgc tacgagcgct gcgccaacgg 240
 caagaaagac cccgcctgca ccaagatgtg caaccaggcg tgcgggtcca cggaccaggg 300
 cgccggtgcc gccggcgccg cgccggcttg atcgcccagc gcattcatcg cttcagctcg 360
 atataatcgc tgctccgtca gcaaccaca tatgattcga tcaatcttcc tcctetaatt 420
 tctccaaccc 430

<210> 2869
<211> 323
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-012-Q1-E1-A1

<400> 2869

ccacgcgtcc ggtcgaagcg aagcttccgg ttcacacagt tcangatcaa cgagcagacg 60
cagcaggtgg tgggtggaaag gctggggaag ccggcgaaaa ctaagacgac ttcaacggct 120
ccatgccccga gagcgagtgc cgctacgccg tcttcgactt cgacttcacc accgacgaga 180
actgccagaa gagcaagatc ttgttcatct cctggtcncc ggacacctcg agggtcagga 240
gcaagatgct gtacgcgagc tccaaggacc ggttcaagag ggagctggag ggcattccagc 300
tggagctgca ggccaacgac ccc 323

<210> 2870
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-A10

<400> 2870

cacgcgtccg aggacgtaag aagtcgtcta attcttggat cgaattagac gacttcttcg 60
tcactctctt cattaacacg ctaagatgtg atctgcagga tatacacaca gacgtgattt 120
aggtagcgac tgattggcag gccacttgaa agttcgctg gtccggagta tcaaccttgc 180
ctaccgcgac gcaagaggca acgatccgta tgctgtccta cagcttggca agaggaaact 240
gaagagaaac gtgaagaaca gatgcgtgaa ccccatatgt caacgggtac atagtctgag 300
cgtcagagat gccagcctac cactgaatct ggacgtgttc gacaaagaca ccttcagcag 360
agatgacccc atg 373

<210> 2871
<211> 457
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-012-Q1-E1-A12

<400> 2871

taccggtctc acgttcncgg gccgccccac gcgtccgaga acacggacga gaaggacgtc 60
acggacatca acgtcaacga ttgcactctt aagaagacga tgttcggcgt ccgcatcaag 120
gcgtacgagg acgccgcctc cgtgctcacc gtctccaaga tccactacga gaatatcaag 180
atggaggact cagccaaccc catcttcacg gacatgaagt actgccccaa caagtttgtgt 240
actgccaacg gcgcctccaa ggtcaccgtc aaggacgtca ccttcaagaa catcaccggc 300
acctctcca ccccgagggc cgttagcctg ctctgactg ccaagggtccc atgcaccggc 360
gtcaccatgg atgacgtcaa cgtcgagtat agcggcacca acaacaagac catggctata 420
tgcacgaacg ccaagggcaa gcacaaaggt tgcctca 457

<210> 2872
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-A2

<400> 2872

ccacgcgtcc ggtgatgctg tggctactca aggacaagct aagcgagatg gaccacgacg 60
gagacggcag gctaagcctg gaggagtctg tcgccaatc tcacatcatc atctccggcg 120
cgcgtcacga cgacgacggt ggccatgcc atgaccttga gcgtgccgaa gctgcgaaga 180
agttcacgga actggacgcc gacaaggaca actacttgac ggtggaagaa gcgcgctgcg 240
tactgcagag cctcgttacg ggggagttct cctatgctac ctcacatgcc aagttcttga 300
tgaaggctga tgtgaaccat gacggcaaac tgtcgctgga ggagatgcta gacgactaca 360
tatccttcta cagcaccgtg tatatggatg atcattacgc cagtgaaggt gaagtagata 420
gtgattcccc cgacgagcta tg 442

<210> 2873
<211> 456
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-A4

<400> 2873

gggtcgaccc acgcgtccaa ccatagcttg ctctctgac catcaattgc aagaggagca 60
agataccacc accgtagcac cacacgcagg tacgaagaag gcgacgaaca tggcaaggct 120
ggccttggtg gcggcggtgg ttctgtgcct cctgttagcg acagggccgc agggggccat 180
cagcgccgag gggatggtgt catttgacaa tttgatcagc tgcaaggtag tgggcaactg 240
cgacaagaac ctgggccccg aggcctcccg cccagggaac cccgccaacg actacacccg 300
cggctgcaac ccgatcaccg gctgtcgagg ctgatcatat ctctctgggc gatgtgcgcg 360
caatgtcaat gtcgcacgcg cgtgcaaggc acaggcctca tcgtgtgggtg ccgcgtgtgt 420
gtatatatta cacacatgca ttatacattg gtcgtc 456

<210> 2874

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-A6

<400> 2874

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tggcctccag gtcctccatc ctacttgcaa cgtcgatgct ggctgcgctg tttgcggttg 120
gtttgtgcac cccccgctc accttccagg ttggcaaggg atccaagcct ggccaccta 180
tcctcaccac caatgttgca accatataccg acgtggagat caaagagcac gggggcgatg 240
acttctcctt tacgtcaag gagggcccga ccggcacctg gacgctcgac accaaagccc 300
cgctcaagta ccccttttgc atccgctttg ctgtcaagtc cgggtgggcta cgcacgctg 360
acgacgtcat ccccgctgat ttcaaggccg gcaccaccta taagaccaca ctcagcatct 420
aatcagcctc tgatgatgaa tttaaatttca aaaga 455

<210> 2875

<211> 330

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-A7

<400> 2875

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ctcttcgatac gatcctgggt tacgtatgca tgcagcgtag ttcgtcgtcg atcgtatgca 120
ctaactgtgca tttcattcgc cgtcgttcga gatcctacgt cgtgcaagag atatgcaggg 180
cgtttagctaa atcgatctcc tacaaggaga tcttccttta gctggctgaa gtgctagcgg 240
tgacgcacac ataggtcttc ctaggaatta gttagccaga ctgaatggtg aaaggcacgt 300
tgcctgtgtg cattcattat gctgggaggt 330

<210> 2876
<211> 453
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-012-Q1-E1-B10
<400> 2876

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tactggaacc ggtgccgatg caggcgtttc tggaggagga tccggtggcg cgcacggtgg 120
tattggagct aacataggtg ctggtgtctt cggaggcgtc aaatttggtg gcggcgccgg 180
aggaagtgtg ngaggaagtg gcagtgtctg tgcaggtgct tctggaggga gtaaatcatc 240
gggggggtggc tcagattttg gatatggttc agcgagcaag gagttataga ggatgatgac 300
cactcaccac cgttagatcg atatgattcg tccaaggaa tttattcctg ccctttttgt 360
tatcgctgtg tgttttatta ccacgcacca gtcaatagtg tggaggcaat atacattgat 420
tccccttgac tggacaatac aaagataacc tta 453

<210> 2877
<211> 443
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-012-Q1-E1-B11
<400> 2877

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tctccgatcc attctccagc gcagcgaagt aaacatgtct gaccgggcaa agatgtcgtg 120

gcaggcggtac gtggacgagc acctgatgtg cgagatcgag ggccaccacc tcgcgggcggc 180
ggccatcgtc ggccacgacg gtgcccgcctg ggcgagagc acggcggttcc ccgagttcaa 240
gaccgaggac atggccaaca tcatgaagga cttcgacgag ccagggcacc tcgcgccgac 300
aggcctgttc ctgggacctt ccaagtacat ggtcatccaa ggcgagcctg gtgccgtcat 360
ccgtggcaag aagggatcag gaggcacac cgtgaagaag acagggcacg cactcgtggt 420
tggcatctac gacgagccga tga 443

<210> 2878
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-B2

<400> 2878
cgggtcgacc cagcggtccg acaaacctcc ggacaagtca tcgcgacaat cgtatgcctc 60
ggtaatagca tcatgggcat gggcgccgctc catgatgagc tcctcgcccg cggttcttgc 120
gggcccccta acgtgcgact cggccccgacc atcaccagta actacaaggg caagtggcac 180
aacgatatgg acacgtgatt cggtcagcgc aacggtgacg tggcaccgga aaacgaacgt 240
tcgtgcgga tcagaaacgt gaagttgcta ccctataacg gcattacagc ttgcagcata 300
gtcccgatct tcagcggtccg gaaagggtgc cagccatgct gccagggtgag atgcaaggtc 360
atgcctgaat gttcgatcaa tcgagtcacc gtgttgatca g 401

<210> 2879
<211> 444
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-012-Q1-E1-B4

<400> 2879
cacgcgtccg acaagcgtcc gccacgcgt ccgcccacgc gtccgctgga ctgcgcccac 60
tccttgatcc agggcctgta cgcccgagc gtggcgagc cccgcatccg ccccgcgctc 120
cgctgctga agcagaacct gtcgttcttg gtgtccgtgc tcgaggaccg cgcgcagccc 180
gtggcggtgc gggaggatgat gcgcgcctcc ttcgaggcgt tcctgatggt gctcctggcg 240

ggcggcaacg agcggagctt cgtgcgcgcc gaccacgcca cggaggagga ggacttccgg 300
 agcctgaggc gcgccttctc cacgtgcggg gaagggctgg tcnccgagga cgtggtggcg 360
 cgggaggcag agacggccga ggccgtcgtg gagctcatgg cacgtccac ggactacctc 420
 atcgacgcgt tcagcgtcgc cacg 444

<210> 2880
 <211> 449
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-012-Q1-E1-B6
 <400> 2880

ttcgccggtc gacccacgcg accgacggcc ggccagccag cgcgcgagag gacgtacgga 60
 cgaacagcta tagggcgagg cgatggacgg ccaacgacga cagcaatggc cgaggtctcg 120
 ctcggggggt gccgcgcgc ctctcctcct cctgctgctc ctgtcgggtg ccttgggggg 180
 gcatggtgat cacggcgcg cggtgcggg cgtcgccct gcagccggca acggcatgac 240
 ggagctgcag aagcacgtgg cgttcttcga ccgcaaccac gacggcatca tcaccttga 300
 cgagacctat caatgtctgc gggacgtcgg agtcggcgat gtcacggcca aagccagcgc 360
 cgcgttcata aacggcgccc tcggcccaa gaccagacct gacaattcca actcctcaag 420
 cacggatatc tacgtagaga acattcaga 449

<210> 2881
 <211> 450
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-012-Q1-E1-B8
 <400> 2881

attcgcggt cgacccacgc gtccaatcca tccgagctaa gtaattaggt cgaaaatgac 60
 ccgtgccagc agcagtagca gcagccggcg tgtgacgtg gtactgctcg gtctccgct 120
 gctgcttctg gttggtgttg cgcaggcgg agtgagggtg gtgcctgctg atgataatat 180
 cgccgccgcc gctgctggca cggcgggtga cgatggcgag ccgcctcagc agtgcgcgac 240
 cccggtgagc gtggaggagg cgtgccgcg cgcgtccgag acgcacgccg gcgtggccta 300

cgaccactgc atggcgctgc tgggcgccga cccgcgcagc aaggaggccg gcaacaagaa 360
catgcacggg ctggcggtgc tggccaacag gatggccatc gaccacgccg ccagcaccga 420
gtccaagatc gacgacctcg cggagctgga 450

<210> 2882
<211> 440
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-012-Q1-E1-B9
<400> 2882

gggccgcccc acgcgtccga gaccagccca cttcacgct caacttctcc aaaggttcca 60
gccagattat cgcgcagtat taccagctca tccgcctcgg attcgagggc tacaaggacg 120
tgatgcagaa ctgccgcgac aacgcggcgg tgctccgcga gggcatcaac aagatgggct 180
acttcgacgt ggtgtccaag gactcgggcg tgccgctggt cgccttctcc ctcaaggact 240
cctccaagta cacggtgttc gaggtggccg agagcctgcg ccggttcggc tggatcgtgc 300
cggcctacac catgcccgcc gacgcggagc acgtggccgt catgcgcgtg gtcacccgcg 360
aggacttcag ccgcgggctc gccgagcgcc tcacgcgga cctgggcaag accatggccg 420
acatggacgc gcacgccggc 440

<210> 2883
<211> 428
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-012-Q1-E1-C1
<400> 2883

acgcgtccga ggcactggcc gtcgtccgcc ggtagctcgt ggtcgtcgc tcgtccatc 60
attcctccct ctccgccggc gtgcccgcc gccacatga cggagtcaga gggcgagacg 120
gaggctgcgc gcgcggccgt gctgacgcc cgcgtgctgc tggggggcgg cgggctcgcg 180
ggggagctcc gcccgccaa cctcggccaa cgggtgctca gcctcttcg caacgtccgc 240
ccgggctccg acctctccca cttccagctg ccggcgacgt tcaacctgcc caagtcgcag 300
ctgcagctgt acggcgaggc cgtgtactgc ggcggcgagg acatgctggc gcggtgcgcg 360

cgcgggcgccg acagcctgca ggcgatgtgc gccgtggtgg cctggagcat ctccacaagc 420
gggcccccc 428

<210> 2884
<211> 460
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-012-Q1-E1-C11

<400> 2884

accggtccgn aaggttcccc ggccgccccca cggtccgac atcgaccacc tcaacgagct 60
tctgctccga cgacgacgac gtgcccgcac atccacatgg cggacgacgc cgtcgccggc 120
ggagcgggccg ttcgctgcgc agggcgggcg ccggcctcgc tgtcttctag caggaagcag 180
cagcagcagc ccgacgacgc cggctgcggc agcagcagc accactacca gcacgacgtg 240
atcatgctga ggccgacgag gagcggggcg gcgttccccgc cgccgatctc cgtgatcggc 300
aagggcgggc ggccgtggct ctgcctgcgg gcgcaccgcg aggggtggacg cctcgtgctg 360
cggcagatgc gcctgccgtc gcaggagctg ctgcagccct gcaaggagga cggcaggttc 420
aagctcctca tgcactcgga ggcccgcgcg cgcccggtgcg 460

<210> 2885
<211> 448
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-012-Q1-E1-C2

<400> 2885

cggtcgacc cagcggtccg agatattcat gtcactgctt gctggtgctc tgtttgggca 60
gctccggggc gtggccctgg tagtcttcgc cgccactgct ggcgcttctt cgtgctattt 120
cctgtcgaag atgattggga agccactggt gttcacgctg tggccagata aactcagctt 180
cttcagaga caggttgcta aaagaagaga gaagctcttg aattacatgc ttttcctcag 240
ggtgacccca acattgccaa ataccttcat caacttggct tcaccgatag tagatgtcnc 300
ctaccacata ttcttactgg gaactctcat tggccttatt ccagcttctt atgtgactgt 360

canggctgga atcgctcttg gagaataaac tcgctaagcg acctttacga caccagtcg 420
 atagcgctgc tattcctgat cgggtgttg 448

<210> 2886
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-C5

<400> 2886

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 tctcaggcag ccacccgcat cgtttcttgc aacgatggaa gagtacatca gagaagcacc 120
 ccgaccctcg atcaagagtg aggagagcga ggagccgaag ctactgacct acgagcaaga 180
 agtccagag gaacccgaaa atgctgtgga agaggagaaa gaagaaccga gtcaaaaacc 240
 agaacctcag cctgtgcctg atccagaacc ccaccacag caaacgactg gagatctact 300
 aaacctggaa gcagaggtga atccttcggc tctggaactc gaacaaagca atgcattggc 360
 actcgcta at gtagcaccag gtgactacaa gccgccagca tctcaaagta tgtttgatgt 420
 caattcgtct ggggtgggagc tggcac 446

<210> 2887
 <211> 459
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-C6

<400> 2887

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 gccgtcggca cctccgcttc aagatgcaga tctttgtgaa aaccctgact ggcaagacta 120
 tcaccctcga ggtggagtcg tctgacacca ttgacaacgt taaggccaag atccaggaca 180
 aggagggcat cccccagac cagcagcggc tcatcttcgc tggcaaacag cttgaggacg 240
 ggcgcacgct tgctgactac aacatccaga aggagagcaa cctccaactt gtgctccgcc 300
 tcaagggagg catgcagatc ttcgtgaaga ccctgaccgg caagactatc accctcgagg 360
 tggagtctc cgacaccatt gacaacgtca aggccaagat ccaggacaag gagggcatcc 420

ctccagacca gcagcggtc atctttgctg ggaagcagc

459

<210> 2888

<211> 447

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-012-Q1-E1-C7

<400> 2888

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ccgccactga tgcgggagga gaggaggaga aacgggagag gagcgtcggc ctgatggccg 120

gcctcatgga caaggccaag ggcttcgtgg tggagaaggt gacgcaaadc cccaagcccc 180

aggctgcgct ggatcacgtc tccttcaga gcatcagccg cgagggcgctc gagctgcata 240

gccacgtcga catcagcaac ccctactcgc accgcatccc catctgcgag atcacctaca 300

cgttcaagag cgccggcaag gtgatagcgt cgggcacgat gcccgaaccc ggggtggatcg 360

cggcgagcgg cagcacaagg ctagacctgc cgggtgaaggt gccgtacgac ttcacgtgt 420

cgtgatgaa ggatctcgga ngggact 447

<210> 2889

<211> 461

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-C8

<400> 2889

attcgcggt cgaccacgc gtccgatect cccctcccc gtgcgaatgc gtctcctccc 60

tcggccggcc gctcgtccgc tcgtctccc ccgcacgaat ctccaggatga tggcggcgcg 120

ccgtgccac tgacgtcgc agcgggtggc gcggcgagcg cgcgatcgcg ggcgatggcc 180

gccgaggcca gcatggagcg cgcgcgcgac ggccggcgcc acgagcacca gcagaagcag 240

cagcggcgca gccaccggcg gtcggcttcg gcgtccgtga cctcgtccac gaaggaattg 300

gcaacaaggt ccgggtccgc cttcggcttc agcgtctcgg tcccaggcgg cggcggcgcg 360

ggcgcaggag tcggagcggc ggctgcggcg gtccccgcc gtggaggcgc ggcgggagcg 420

cgagcggcgt cgggcgcgcg agcagccgcg gtgcggggag g

461

<210> 2890

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-D10

<400> 2890

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taagggtcccg cccttttccg acattcacag gggggacagg aaatcagcgg ccatggcctc 120
gattccggcg acgaccttcg cgcgtcatctt atccgtcctc ttctgtgccg cggtctggcac 180
cgccgtcgac aacgacctcc ccgactacgt catccagggc cgcgtctatt gcgacacctg 240
ccgcgcgggg ttctgtacca atgtcaccga gtacatcgcg ggcgccaagg tgaggctgga 300
gtgcaagcac ttccggcaccg gcaagctcga gcgtctccatc gacgggggtga ccgacgggaa 360
cggcacgtac acgatcgagc tcaaggacag ccacgaggag gacatctgcg aggtggtctt 420
ggt 423

<210> 2891

<211> 459

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-D11

<400> 2891

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cttcttcccc gaccttctcc cttaaggcct caaccaagca aaggtttgat ttacataacc 120
agagtaacgg acccagcgcc agctggaaca acgaccagag actccggcat ccagtcgacc 180
aacgtacaat gcgtttcatc caaggaagga cctccaagca gacgagcagg gttaagaccc 240
ttctatggct tgccttgtcc cgccttgccg ctgcccgcg tccccgcctc gctcgcaagt 300
cgatttcccg cagcgatgtt ggacagctac tagcactcgg acacattgat cgtgctctcc 360
accgtgcaga gcagctcata gaggaggaca acatgctgga ggcgttcaac ataatagagc 420
tacactgcaa tcgcctcatt gagtgcgcaa agcagctag 459

<210> 2892
 <211> 452
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-D12

<400> 2892

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ggtcaggaat tcccgggtgc gccccacgcg tccgctacca ctctcgcgtc ggtcccgcga   60
tgggcctgtt ctcacggcc gctaagagat gtagaaagtg caagaagttc ctccgcagcg  120
cgggcgcggtg ctgctgctcg ccgtcggcct cctccgcccc tgctggtggt gtgcgcggca  180
acgaagagggc gtcgacgtcg gcgctggctt ccgcgccaga tggcaagaaa aagaagaggt  240
ggaggaagag aaagttctgg agaaagaaga agaaggccaa gaaggagagc gacgatggca  300
gcggcgagct cgtggatctc gtcaacagct tctcggccaa gtccgacgtg tgcaagaacg  360
tgaatgcggc cgaggagatc ctacggggct gcaaccagaa catgccagc agggcgctga  420
cgttcagcca gctgggcgcc gcgaccgacg gg                                     452
  
```

<210> 2893
 <211> 442
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-D3

<400> 2893

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cgggtcgacc cacgcgtcag ctttgggtctt gcaaggaag tctcatcatt gccaccatat   60
acagaatatg tctcaactcg ctggtatcgg gcaccagaag tcttgctcca gtcattctgct  120
tatgattctg cagttgatat gtgggcaatg ggtgccataa tggctgagct gttgacactc  180
catcctctct ttcttgaac cagtgaacca gatgagattc acaagatatg caatgtcatc  240
ggtagtccag atgagcaatc ttggcctcaa ggattgtctc ttgcagaagc aatgaagtat  300
cagttcccac agaccaaagg cagtcaattg tctgaggtga tgacaacagc tagtagcgag  360
gcaattgacc tcatctcatc actatgctca tgggatccta gcangagacc aaaggccaca  420
gaagtcctcc agcatacctt ct                                     442
  
```

<210> 2894
 <211> 449
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-D4

<400> 2894

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ccacgcgtcc gctcccccttc cctgttctc cgaccacctc aacgagcttc tgctccgacg   60
acgacgacgc gccgccacag ccacatggcg gacgacgccg tcgccgccgg agcgggccgtt  120
tgctgcgcag ggccggcctc gctgtcttct agcaggaagc agcagcagca gcccgcgcac  180
gccggctgcg gcagcagcag cagcgacgac cactaccagc acgacgtgat catgctgagg  240
cggacgagga gcggggcgggc attcccgcgc ccatctctcg tgatcggcaa gggcggggcgg  300
ccgtggctct gcctgcgggc gcaccgcgag ggtggacgcc tcgtgctgcg gcagatgcgc  360
ctgccgtcgc aggagctgct gcagccctgc naagaggacg gcagggtcaa gtcctcatg  420
caccgggagg cccgcgcgcg gccgtgcgg                                     449

```

<210> 2895
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-D7

<400> 2895

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ggtcgacca cgcacccggt caagaagacg tgctgtttga agagcatgag catacaacag   60
ctgatgggtc acctccaac ggtgacaagt tgagcggcgt agcgaatctt aaggctggga  120
tttctctgct caatataaga ctgagggcac ttgaagatga ccaggagttt ctcaagcagg  180
tgttgagttc cctccaatgc ggtagtgatg gactgcagtg tatacaggag ataagcggcc  240
atctagcaga gttgcgaata gttgtgactc gctaaggaaa atggttttgc cccgagtcca  300
aattgttagg tcatcatgag gtcttctcat gcagcagact aactaagggtg cttccactga  360
gtgccacaa tccaatcta tctgaagatg gatgccgttg caggaaatac ccatgctctt  420
cgcttctgat cgggctcaac agcagaccaa aat                                     453

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<210> 2896

<211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-D8

 <400> 2896

 tcgacccacg caaccgcatg aagatcaagg tggttgctcc tccagaaaagg aagtacagtg 60
 tctggattgg aggatccatc ctggcatcgc tcagcacctt ccagcagatg tggattgccca 120
 aggctgagta cgacgagtct ggcccgtcca tcgtgcacag gaaatgcttc taattctttg 180
 ggccaagag atgcaaagcc gagaggagcc attatcgcca gcctcccgcc cggtttcttt 240
 ctctttttgt tgctgtttct tcattagcat gaacaaagtt ttctgccggt ctgtcggcag 300
 ccgctttctc ctattcatca agactgtaat gtctattggt gctacctaata gcttctcact 360
 tgtcattttg gacacatggt cgacctattc aattttaatg agatgcctga tgaggctact 420
 tgc 423

<210> 2897
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-012-Q1-E1-D9

 <400> 2897

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 ggtggtgcct gtgatttctc tgattccagt aactcctcga aagatgcca ggagagatcc 120
 acgtccatga ggaagcttat aatcgcagtg atcctttgca tcatattcat gacggtggaa 180
 gtggtcgggg gcatcaaagc aaacagtctt gccatcttaa ctgatgcggc gcaccttctt 240
 tctgatgtgg cagcatttgc catatcgtaa ttctctctct gggctgctgg atgggaagca 300
 acaccgcagc agtcatatgg gttcttccgg attgagattc ttggtgcctt ggtctccatt 360
 cagctcatat ggctacttgc tggcatactg gtatatgagg ctattgtaag gctcattaac 420
 gagagtggcg atg 433

<210> 2898
 <211> 449
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-E1

<400> 2898

cacgcgtcca ccaaacgtcc ggtegtcgtc gtccctcccg aaacaaaaga agctattttg 60

acaccacaca cacacacaca gaggagagaa gataagagaa cgaggggagc ggcagccagc 120

gccgctagct gaagcaaggc agggcaagag aatccgtacg tcgaggtgca ggtegttaggt 180

aggatggacg cggaccagca gggcgtgggt gcggcggcgg tgaagccggc gctggccaag 240

gggacgccgt cggcgtcgtt ccggctccgc aacgggagcc tgaacgcggt gcgcctccgc 300

cgctgtttcg acctgttcga ccgcaacggg gacggcgaga tcaccgtgga cgagctggcg 360

caggcgctgg atgcgtggg cctggacgcc gaccgcgccg ggctgtccgc caccgtcggc 420

gcctacgtgc ccgacggcgc cgcgggcct 449

<210> 2899

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-E10

<400> 2899

cacgcgtccg gcagacgcta gcgcatgcac tacacacacc gtaccgagtg aacgaaatgg 60

caggtgcgtg agcgaagacc tcgaggttcc gcatggagcg ctctttgtga aagattctca 120

acagtgtaca catgaacata gtcggacaaa gggaaagaag aaatgaacag aagttccagg 180

accagcgtga agcaggggtg gagttctctt acgtgtatct tccttttact ttgtagttcc 240

agtagtttaa aattcactta acgttttgat cattgaatgc cacatataat gccacaccag 300

acgcgccggg attcgatgac caaacgtcaa cgaagtacat cgcgggcgcc aaggtgaggc 360

tggagtgcaa gcacttccga accggcaaac tcaagcgcgc aatctacggg gtcacc 416

<210> 2900

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-012-Q1-E1-E11

<400> 2900
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 acccgagag caacggcacc tggaagttcc caggcatcgg cgccttccag tgcaacgaca 120
 ggtacatgcg tagccgctg. aaggcgagc cggaggcggc cggcaagcct gaggggggcc 180
 acggtggggc gaccgacgt ggcggtaca acaactggcc ggaggacacc gtcttcttcc 240
 gcggcgacaa cgggtgggtgg agcaccgagt acggcgactt cttcctgtcg tggactcgc 300
 agatgctgct ggagcacggc gaccgcatcc tgcggggcgc cacgtccgtg ttcggcgcg 360
 cgcccgtaga ggtctccgtg aaggtagggc gcactccactg gcactacggc agccgggtccc 420
 acgcncccga gctcaccgcg ggg 443

<210> 2901
 <211> 96
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-E2

<400> 2901
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 gcggcgacaa cgactacttg cgccacatc gacatg 96

<210> 2902
 <211> 463
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-E6

<400> 2902
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 cggcaacaag atcagcgtgg ccttgctgag cgtggcccta gtgggcctgc tcctctgcca 120
 cctcgccacc accgcctccg cccaccagaa agacatccac gtccctcgga gcgtcgacgg 180
 ctccagcgac ggcagcagcc ccgagtccga aggccgcgtc gtctacgcgg acatgaagct 240
 ggctgatacg gaatccgatg cgccggcgcc ggccggcgcg ccggggccgt cgtccgggtg 300
 aactgagaag cgtgcgtcca gccaaagcaag gtgggtcaaaa ccgagaacta attaagggct 360

cgattgtgtg tccggctact actgttcttg ccataattat atatagatac gcaaagtgtg 420
gccaagccta cccacatgca tgctattgca tgcctccgaa tat 463

<210> 2903
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-E7

<400> 2903

cccacgcaac caaggacgcg tgggcggcga ccgacctgtg cccacccaag gacaagtggg 60
gcaagccgcc gcaggagcac ttcgacctca gcatgcccgc gttcctccag atcgcgcagg 120
agaaggccgg catcgtgccc atctcctatc gcaggggtggc atgcgcaaaag cagggcggca 180
tccggtacac catcaccggg aacaagtact tcaacatggg gacgatcacc aacgtgggcg 240
gcgccggcga catcgcgggc gtgtcgggtga aggggagcaa gcgcgtcaag tggacggaga 300
tgaagcgcaa ctggggggcaa gtgtggcaga ccgaggagga cctcacctgc gagtcgctga 360
cgttccgggt gatgactagc gaccaaccgc aaggcacctc atggcacggt ctccccgctg 420
a 421

<210> 2904
<211> 458
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-E8

<400> 2904

ttcgccggtc gaccacgcg accgctctcg tgtcgggtccc gcgatgggca tgttcgcac 60
ggccgcaaag agatacagca acggcaagaa ttttctccgc agcgcgggcg tgtgctgttg 120
ttcgccgtcc gcctccgccc agcttgggtg tgtgcgcggc aaggaagaga catcgacgtc 180
ggcgccagct ttcgcgccgg atagcaacaa gaaaagggtg aggaagagga gggttctggag 240
aaagaagatg aaggccagga aggagatcgg cgggctggtg gacctcgtca acgatatttc 300
ggccaagtca gaggagagcc taggggttag caacaaaaac atgcccagca gggcgctgac 360
gttcagtcag ctgagcgccg caacggacgg gttcagttcg cagaacctgc tcggagaagg 420

cggttttga cgggtgtaca aagggtcct cgaggaca

458

<210> 2905

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A1

<400> 2905

ccacacgtcc ggctcgtcgc tcaactaccc cgccttcacg cctccctcac caaataaggt 60

cccgcccttt tccgacattc acagggggga caggaaatca gcggccatgg cctcgattcc 120

ggcgacgacc ttgcgcgtca tcttatccgt cctcttctgt gccgcggctg gcaccgccgt 180

cgacaacgac ctccccgact acgtcatcca gggccgcgtc tattgcgaca cctgccgcgc 240

cgggttcgtg accaatgtca ccgagtacat cgcgggcgcc aagggtgaggc tggagtgcaa 300

gcacttcggc accggcaagc tcgagcgtc catcgacggg gtgaccgacc ggaac 355

<210> 2906

<211> 465

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A10

<400> 2906

tggtacgctt gcaggtcact atccggaaat cccgggtcga cccacgagtc cgccgcggcg 60

cagggcaacg gctgttccag cgtgatgatg accctggccc cgtgcatgga cttcatctcc 120

agcaaggcgt cggagccggg gatctcctgc tgctcgtgct tggccggagt cgtgcagacc 180

gacccccgct gcctctgcat ggtactggac ggcactgcca cgtccttcgg catcgccatc 240

aaccagacca gggcgcctgga gctccccggc gtctgcaagg tcaaggcgcc gccgctcagc 300

cagtgcacag gcgtccctgc ggcacctgca ccgacgcctc ccgacgagcc agcagcggca 360

gctgaggaag aagccgacgc agctgcagat gcccttcag caaatggagc ctcaagctcc 420

acaaactcaa agaatgcagc gagcttactg cttctcatct gcgca 465

<210> 2907

<211> 430

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-A11

 <400> 2907

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 tttttgtttt ggtgctattg atctctacga cggcaacggg gacggcgacg acagttcagt 120
 cgcggcaggc ggggctcagt acctcccgcc aaagaggctc tggattccgg gcgtggcgga 180
 gggatgtgct gaggccggac aggacggccg gcgaagcttg ggcgccaccg gcgccaagg 240
 ccaacggcaa cgtcccagga gggcccttcg gtcgtcgttg actcatccag atccagtcgc 300
 acccgcccaa tcgccatcgt ttcattgacac atcgaccaga tagtttagca ttcccatctc 360
 actggtgtgt gttattttta gcttctttca acgatgaaga actactggtg attacttatt 420
 gcatcgaaaa 430

<210> 2908
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-A2

 <400> 2908

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 cgcctcacta ccgagggagg caccaagtcc gtctacgacg atgtcatccc tgccaactgg 120
 aaggccaaca ccgcctacac cgccaaataa ttaactttag tgctgacaat actttaagcc 180
 ggcctatgct agctatacta gaattgggtg gateccaagc aatgcattac acatgcatgc 240
 attggaccgt gatattctatt tgctaccact accctattac gacagtgatg ctggcgccaa 300
 caatgatggg gtcatectcc ttctccatct tcttcattct catatatagc tagagtgaga 360
 cttctctgtt gtttaaaaga gaaaagttaa gaaatggatt gacaagtat ataataagtg 420
 cctaataaaa tatttgatag gccttcattt 450

<210> 2909
 <211> 368
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A3

<400> 2909

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gcaggacacc atcggcgcgg cgcagcgggc catcacgttc aaggacaccg gcaccgcca 120
gatcatgctg cagctcgccg tccaggactt cgactcgtgc gaccgcccct tcaccagggc 180
cggcgtcccc aaccccatgg ggaagtttga caaggagctc aaccagatgg ccagcaactg 240
catggctctt gcaaacatga tatgaaccac gcatgcaacc ccagcgtgag gtgccatcgc 300
atgcaaggaa tgcttgcatt caattttcaa ttaattaaga attcattgaa attatgagtt 360
atataaaa 368

<210> 2910

<211> 459

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A5

<400> 2910

tggtagccct gaaggtacta gtccggaagt cccgggtcga cccacacgtc cgccctccct 60
ccctcacaca aataataagg aaaggtcccg cccttttccct ccgacatcca caggggggag 120
gggaaaacac gtgcattcac cgggcggcaa taatggcctc ggttccggct ccggcgacga 180
cgaccgccgc cgtaatccta tgcctatgcg tcgtcctctc ctgtgccgcg gctgacgacc 240
ccaacctccc cgactacgtc atccagggcc gcgtgtactg cgacacctgc cgcgccgggt 300
tcgtgaccaa cgtcaccgag tacatcgcg gcgccaaggt gaggctggag tgcaggcact 360
tcggcaccgg caagctcgag cgcgccatcg acggggtcac cgacgcgacc ggcacctaca 420
cgatcgagct caaggacagc cagcaggagg acatctgcc 459

<210> 2911

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A6

<400> 2911

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gggtcaaccc acacgtccgc cctccctccc tcacacaaat aataaggaaa ggtcccgcc 60
ttttcctccg acatccacag gggggagggg aaaacacgtg cattcacccg gcggcaataa 120
tggcctcggg tccgggtccg ggcagcagca ccgccgccgt aatcctatgc ctatgcgtcg 180
tcctctcctg tgccgcgggt gacgaccca acctccccga ctacgtcatc cagggccgcg 240
tgtactgcga cacctgccgc gccgggttcg tgaccaacgt caccgagtac atcgcgggcg 300
ccaaggtgag gctggagtgc aggcacttcg gcaccggcaa gctcgagcgc gccatcgacg 360
gggtcaccga cgcgaccggc acctacacga tcgagctcag ggacagccac gacgaggaca 420
tctgccaggt ggtg 434

<210> 2912
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A7

<400> 2912

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cggagattga tagtactagt ataaagcagg cggagacagc cggccccctc ggctcgtcg 120
ctcccccttc ctccccgtcc ccacccacat gccctgcctc cgcgccgccc cgccctgccc 180
aagctgagtt cccccacccc caacaaacaa ttactagagt agctgcattg gcggggaaat 240
taaagcgcta gaagctcagc agcaatggcg gagcaggcgg gcgtcggaag gtactgggtgc 300
cacatgtgcg ccgcggccgt tagccccgcg gagggcgagg tggagatgaa gtgcccgttc 360
tgccacagcg gcttcctcga ggagatggag accgccccgc gggccgcgac cgacgacggt 420
gac 423

<210> 2913
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A8

<400> 2913

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tatacgcatc gtcaaggaga ttgtccaaga caaagaactg gatagttgcg ctcaagacat 120
 tgatagtggc gcataggctt ctgaggggaag gcgatcccat gttcaaggaa gagttcctgg 180
 cctactcatc cagaggggaac atcttgcaca tagccaattt caaggacgac tcgagccagt 240
 cagcttggga ttgctccgca tggattcgcg cctatggatg cttcctggag gaacggctcg 300
 agtgcctcag ggttctcaga tacgacatcg aaaccgaacg tctcgtcaga tatccccaga 360
 cttccagcaa ggtacatagt aaaaccagga ccctgcctag cccggaactc ttggagcagt 420
 tgcctgca 428

<210> 2914
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-A9

<400> 2914

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 cgttccgtct cctcgtcgtt ggcgcccctg ctctcctctt cctcctcgtt ctccgccgcg 120
 gccagcgcgc ggaccgtggg cgacaccgtg caggacgcgt gcagcaagac ccagttcccc 180
 aagatctgcg tggacagcct cgccgccaag ccggagagcc agaaggcgac gccgcgcaag 240
 ctggcggagc tgttcgtgaa catcgcggcc gagaaggggt ccgggatggc caccttcgtg 300
 caccgcaagt acagcgacaa ggaggacagc gacatgttca ggtgctacga cagctgctcc 360
 gacgacgtgg aggaggccgt cgccacctc aacggcctcg tccgggagcc caccgacgcc 420
 aagtt 425

<210> 2915
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-B1

<400> 2915

ccacacgtcc gggcccgcgc gtgcgtgttc ctctgtgtgc tctcctggc cgccgtcgcg 60
 gtggcgccgt ttgcgggggc tgcgcgcgtg gatgtcgtgg agggcaggtc catggcgctc 120

gccgacgcgc ctgaggcggc ggctgacgcg cccgctcccc gtccccgactc cgcctcatcc 180
 ccggactcgt cgtcggaggc gccctccagc agcagctcat ccgactagcc gcgcacaacg 240
 cagttcttgt catgatctat ctagcaaata aaaagatcat atgtctcggt tgattctctg 300
 gaataactaa tagtatatat gctgcgcccc gatgatatat aaatatgtgc atgaaatgcg 360
 tgcggaacac gcatggaatg tgcttgccca gctaattggt gttgttaatg ttgttggtgg 420
 tttt 424

<210> 2916
 <211> 459
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-B10

<400> 2916

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 cgcaaccaat aatagcaagt gtgatcatcc gttgatccat cttgctaata agcctgcgtg 120
 cccttcgttc ttctctgtct cgatccccgac gacgctccgt tcggctccgg caaaccacat 180
 caagtcgcga tggagatgaa gaaggctgcc tgcgccgtcc tcgccgccgc cgcctccgcc 240
 accgtggtcc tcgccgccga ggccccggcg cccgccccca ccagcgctc ctcggccgcg 300
 ttccccggcg tcggcgccgt gctgggcgcc tccgtgctct ccttcttcgc ctactacctg 360
 cagtaaaatt aaaggaggat cggagggaga ggctgctggc tgccattgcc tgtattcggt 420
 tggattccgt ttatatatat atttaagtac tttaatttg 459

<210> 2917
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-B12

<400> 2917

gtcgaccac gagtccggtc gcctgcgccg tcctcgccgc cgccgcctcc gccaccgtgg 60
 tcctcgccgc cgaggccccg gcgcccgcgc ccaccagcgc ctctcgccgc gcgttccccg 120
 ccgtcgccgc cgtgctgggc gcctccgtgc tctccttctt cgcctactac ctgcagtaaa 180

attaaaggag ggctcggaggg agatgctgct ggctgccatt gcctgtattc ggttggattc 240
 cgtttatata tatatttaag tactttaatt tgggtctgaa catgtcgatt gatccattca 300
 ttttatttgc tttgccattt ctcccccttc tgtaatttc gatatgtaaa gaggggagaa 360
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<210> 2918
 <211> 424
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-001-Q1-E1-B2

<400> 2918

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 ggttggtgtt gcgcaggcgg tagtggagtt ggtgcctgct gatgataata tcgccgccgc 180
 cgctgctggc acggcgggtg acgatggcga gccgcctcag cagtgcgcga ccccggtgag 240
 cgtggaggag gcgtgccgcg gcgcgtccga gacgcacgcc ggcgtggcct acgaccactg 300
 catggcgtcg ctgggcgcgcg acccgcgcag caaggaggcc ggcaacanga acatgcacgg 360
 gctggcggtg ctggccacca agatggccat cgnacacgcc gccagcacgc agtccaagat 420
 cgac 424

<210> 2919
 <211> 440
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-001-Q1-E1-B3

<400> 2919

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 catgcagttc cgaaggggta agtgcaagta cgactccaag gtcaccttcc accttgaaaa 120
 ggggtgcggc cccaactacc tggcactgct ggtcaagtac gtcgacggcg acggtgacat 180
 tgtggcagtg gacgtcaagg agaagggtc cgacacatac gagcccctga agcactcctg 240

gggcgccatc tggaggaagg acagcgacaa accgcttaag ggacccctca ccgccgcct 300
 cactaccgan ggaagcacca agtcctgcta cgacgatgac atccctgcc actggaaaagg 360
 caacaacgcc tacaacgcc aataattaac tttagtgtg acaatacttt aagccgacct 420
 atgctagcta tactagattg 440

<210> 2920

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-B5

<400> 2920

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 tcgcggacgg cgtttaggaa caaggactgc ggcaagggcc ggcgatcgcg aggcacagtg 120
 ggcggtagag cagagacact ccacgggcct caaccagctc gccaccacct cctcctccga 180
 ccttctaggc agcaaggact agcatgcagt ccgagctcac cgaggaggcc cgcaaaggctc 240
 gcaagatata cgtagctaca gtcttctccg gcgactagcc caccatctct agcgccgctg 300
 atgcggctga tctcgctggt ctccggagac cgacggcgctc cagcgggtggc cggaggagtc 360
 ctgtgttctt cgtttcttta ggtgtactta tgtgggtttt ggggtggcaa gagagttttt 420
 ttttgtgaac tctggtgtat cggatcaagt g 451

<210> 2921

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-B6

<400> 2921

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 cgagaacgat gcggcgccgc acgggacgcc gccggccaag aaggaggccg tggaggcaat 120
 gccgaccgtg gcaatcgccg gcggcaacga tggcgacgac gcggccagct gcccggctctg 180
 cctggaggac tacgcgcccg gcgagcgcg cgcgagatg ccctgcacgc acatgttcca 240
 cggaattgc atcatgccgt ggctcgagat gcacagctcc tgccctgtct gccggttcca 300

gctgccggcc atcgacgaca agagctcatg c

331

<210> 2922

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-B7

<400> 2922

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attgaatggc atcggcatca aggtgtacgg gatggactgg actggtcatg gtggaagtga 120
tgggtctccat ggatatgtgc aatctcttga tcatgctgtc agtgatttga aaatgtacct 180
caagaaagtg ttagctgaga accctgggtct tccatgcttc tgcttcggtc actcgactgg 240
tggagggtatc attctgaagg ctgcacttga tccagaggta gaaactctcc ttagagggtat 300
tgtcttgaca tcaccagctg tccgtgttca gcctacacac ccaatcatag cgggtcatggc 360
accgattttt gccctcatcg cgccgaggta tcagttcact gcgtcccaca ggaacggccc 420
gccgggtgtcg cgc 433

<210> 2923

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-B8

<400> 2923

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aaattaaaaat aaaaaaaaaa aaaaagagat aaaaaataaa atggaaagaa aaatgaaaaa 120
aataaaagaa aaaaaaaaaat aggtggaggc tcttgatgat gatgttaatg atttgataat 180
gtatctctcg aaagtcttag ctgatatccc tgatcttcaa tgcacgggtc tcggtcattc 240
aacgtgcttg atgtgaatac cttaaggctg cacttgatta acatgtagaa actctcctta 300
tatgtattgt cttgacataa tcagatgtcg gtgttcagcc tagacattca atcatattgg 360
tcatggcaaa gatttatggg cacatcg 387

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<400> 2924

<210> 2925

<212> DNA

<213> Zea

<400> 2925

<210> 2926

<211> 437

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-001-Q1-E1-C10

<400> 2926

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tcggcgatcc tcgtcgtggc ggtggtcgtc ggtgtggtcg ccaccgtcac ccgctccggc 120
aagaaggccg gcgacaactt cacgggtccc ggggaggctt cccttgccac gtccggcaag 180
tcggtcaagt ccctgtgcgc gccacccta tacaaggagt cgtgcgagaa gacactgtcc 240
caggccacca atggcaccga gaacccaag gaggtgttcc acagcgtggc caaggtggcg 300
ctggagtcgg tccagacggc ggtcagcag tccaagtcga tcggcgaggc caaggccagc 360
gactccatga ccgagagcgc gcgcgaggac tgcaagaagc tcctggagga cgccgccgac 420
gacctgangg gcatgct 437

<210> 2927
<211> 428
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-001-Q1-E1-C11

<400> 2927

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cgcgggggta gggccgggtg agcacgagcg ctgcccgtc gctgaaccat ggcgggctcc 120
gcggtggccg tcgtctctct gtcggccgtc gcgctgctct gctgtacca cctcttttc 180
ctctccctgt ccgtcccga cccggcagca gcagcagccg tccccgccg cgccggtggc 240
caccatggca gcaacgttcc gtccgggtca ggaaccgcca acgtcgtcct ccgcttcggc 300
ctgtccgggc agccgctccg cctccacgac cccgctccg ccgcccggct cccggacatc 360
gacaccttcc gcggcaagct cgagcggctg cttctctcncg acgaccacga acccggttgg 420
tcccgcgcg 428

<210> 2928
<211> 413
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-C2

<400> 2928

ccgggtgccc ccacacgtcc gaacgaagct gctgctgcta ccggccggcc gggcatgacg 60
atgacacgga cgatgtgect aggcctgctg cttctactac tggcggcggc gtcgacagcg 120
acggcgcatt tcacggtcgg cgatgtggat gactacgtgt ccaagcgcac gcaggagtcc 180
cgccacagga acaacgggtgg cgcgggcacg gatgacctca tctccagtgc ggcgcgcttc 240
cacgccaacg tggatgcacg cgcctatggc cgtagatccg acctgcagga ggaggcaaca 300
gctaccgtaa taaccaaagc ggaagcaca gaggcttcag ctgaagggtg cgattaacct 360
acctaaccat attatttatt cattcatatg catgcatcct tgttgctatg cca 413

<210> 2929

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-C4

<400> 2929

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acggccacgg caccatcgac gggcagggag ccctggtgtg gagcaagaac cagtgccagc 120
attcttacia ttgcaagatc ctcccgaata gcttggtgct ggattttgtg acgaacgtcc 180
agatccgcgg catcacgtg ctcaacagca agttcttcca cctcaacatc ttcgagtgca 240
agaacgtgct gatcgacaaa gtgacgggtca agggccccgg cgacagcccc aacacggacg 300
gcatccacat cggcgactcc agcaacgtga ccatcagcag caccaccatc ggcgtcggcg 360
acgactgcat ctccatcggc cccggggagca agatgatccg catccatggc gtcaag 416

<210> 2930

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-C5

<400> 2930

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aatggaaaagg atgttgaagg cggattggaa gaagggaata agaaaaggaa ccgtaccggc 180
tggtggaata acgggcgctg ccggcttaac tgcgggacaa cgagtacatc caccgccact 240
accgctgcga atggccgctc ccgcacgttc tgctctccgc cttctccatc cacaacgaga 300
ccctcaacgt ctggacgcat cttatangat ttttcatctt tctcgtctg accatataca 360
cagcagcaca agttccaaat gcagtagata tccggagctt gcagcatttg ccagatgtac 420
tgagaaaggc tgata 435

<210> 2933
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-A6

<400> 2933

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cgggcgctct cctgttcctc ctctcctcgc tgctggtgcc agggccggga gggcggcgcg 120
gaggtggcgc tcatggggct cgcgggggac gggtcggcgg acaccgcaa cctcagtaat 180
agtgaaaatg gtcgggttcag ttatggagtt gcaagttctc ccgggaaaag agcatcgatg 240
gaggacttct atgaggcaag gatagacgac gttgacggag agaaagttgg aatgtttggt 300
gtgtatgatg gtcatggagg agtcagagca gctgagttcg ttaagcagca tcttttcaac 360
aatttaatcc aacacccaaa gt 382

<210> 2934
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-A7

<400> 2934

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gtcacacgcc accgcacagc tagctaccga cgaagacaag gcgggcaatg gccaaaggcg 120
ccctgccgct tccgtcgtg ctctcctca ccgccttctt cttccaccac ccctgctgca 180

cggcgcaagg ccgcgccgaa aacatctcgg aggtc gatgc cgcggtccgc gcccgcgcggt 240
 ccgagctgct ccgcgacgcc agcagccagc tcgtcgacct gccctccccg gccaacctct 300
 ccggcgcggg cgtcagggcc tcggccctca acgtgcgcag caacgcgctc tgggcccggag 360
 gcgtaaacac caccggcttc accgtctcgc cgcgcgtcgt gccggccccg ttcgcgcgcc 420
 gcctcg 426

<210> 2935
 <211> 456
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-A8

<400> 2935

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 cgaaccccca cccgtccagg atgctggagg aggcagagat gggcgtgacg caggggcagt 120
 tcaaagccaa gcaaagcaac ctccaggcca tggatgatcg cggcgcgggc ggtggcgcg 180
 cggccttttg gatagtagcg gccatatgcg tcgtggctta cactcgaag aagaggcg 240
 cgctgggtaa cagcgtgtcg cattcatcgg gatggctgcc cgtctacggt ggcaactcgc 300
 acacaaacgc cagcaagtcg tccggcggca agagcgcggc gctcaacccg aacatcacgg 360
 ccatgtgccg gcacttctcg ttccaggaga tcaaggcggc gaccatgaac ttcgacgagt 420
 cgctgggtgat cggcgtgggc gggttcggca aggtgt 456

<210> 2936
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B10

<400> 2936

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 gccagatccc tctctgcaa ggtttctttg cgagtggccg gagaagatga tgggcggggt 180
 cctctccagg gtctctctgc tggcttttgg ctatgcctat cctgcctatg aatgctacaa 240

gaccgttgaa ctgaacaaac cacagattga gcagctcata ttttgggtgc agtattggat 300
 tttagttgcc ctgttgacag ttttggacag aattgggcga tttacaatat catggctacc 360
 cgtgttactc agaagcaaag gtgttgttca ttgtatattt gtggtaccct aagacaaacg 420
 gaactacgta tgtgtatg 438

<210> 2937
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B11

<400> 2937

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 gctgctcgtc ctgcgcgect tctttcttcca ccacccctgc tgcacggcgc agggccgcgc 120
 cgaaaacatc tcggagggtcg agggcgcggt ccgcgcccgc gcgtccgagc tgctccgcga 180
 cgccaccagc cagctcgtcg acctgcccct cccggccaac ctctccggcg cgggcgctccg 240
 ggctcgggcc ctacagcgtgc gcagcaacgc gctctggggc ggcggcgtca acaccaccgg 300
 cttcaccgtc ccgcgcgcgcg tcttgccggc cccgttcgcg cgccgcctcg caatcgtctt 360
 cgagctcttc gtgggaaact cgacggccgc gttcgccgcg ccgcgcggct acgcgctgg 419

<210> 2938
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B2

<400> 2938

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 atccctcgct aataacatca tggctcgtggg tgctcgtcctt gcagcgcctcg tcgccggcgg 120
 gtcattcggg cccccgaagg tgccgcccgg tcccaacatc accaccaact acaacggcaa 180
 gtggctcacc gccagggcca cctggtacgg tcagcccaac ggtgccggcg ctcttgacaa 240
 cggcggtgcg tgccgggatca agaacgtgaa cctgccaccc tacagcggca tgacggcggtg 300
 cggcaacgct cccatcttca aggacggcaa gggctgccgc tcatgctacg aggtgagatg 360

caaggaaaaa cctgagtgtt cgggcaatcc agtcacgggtg tacatcactg acatgaacta 420
cgagcctatc gtcacctaac acttcgac 448

<210> 2939
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B4

<400> 2939

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ccctcgctaa tatcatcatg gtcgtgggtg tcgtccttgc agcgtcgtc gccggcgggt 120
catgcggggcc cccgaagggtg ctgcccggtc ccaacatcac caccatctac aagggcaagt 180
ggctcaccgc cagggccacc tgggtacggtc agcccaacgg tgccggcgct cctgacaaca 240
gcggtgcgtg cgggatgaac aacgtgaacc tgccacccta cagcggcatg acggcgtgcg 300
gcaacgtctc catcttcaac gacggcaaag gctgccggtc atgctacgaa gtgagattca 360
acgaaaaaac tgaattctcg ggcaatccag tcacgggtga catcactgac atgaactacg 420
agcctatcgc tccctaccac ttcgac 446

<210> 2940
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B5

<400> 2940

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cagcctgatc aagaattcct tgtgcagggt tcagctgtct caagattgaa gcatgagaat 120
gttgtccaac tcgtcggata ctgcgccgaa gggagcacc gcgtccttgc ttatgagtat 180
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ctcgagttcc tccacgagaa ggccgatcct cgagtgggtcc accgcgacat caagtcaagc 360
aacatactgc tctttgacca tgatgttgcg aagatcgggg acttcgacat ctcaaaccag 420

gccctgaca tggctgcgcg cc

442

<210> 2941

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B6

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cgccgccgga gtgctgctgg tctgtccgc gcttggtaac gctggcgcg gacgaggacc 180

cgtacttgtt cttcgtgtgc aacgtgacgt tcggtaccag gtctctgctg ggcgtgcccc 240

agaatgtcat catcatcaac agcgacttcc ccggcaccag tatcaactgc tccgctagca 300

gtatcatcgt cgtcaatgtc ctcattcattc tcgaccatcg gctctcttcc acctgtacag 360

ggatgcatca catgaagaac tcttgga 387

<210> 2942

<211> 456

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B7

<400> 2942

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gcctatccgg gatcctcgtc gtggcggtgg tcgtcagtgt ggtcggcaac gtcacccgct 120

ccggcagaaa tgccggcgac aacttcacgg tcccgatgga ggcttcgctt gacacgtccg 180

gcaagtcagt caagtccttg tgcgcgtca gcctatacta ggagtcgtgc gataagagac 240

tgtcccaggc caccaatcgg accgacaacc gcaatgaggt gttccagatc ctggacaagg 300

tggaactgcg ctcagtccag acggaggtcg agcagtcgac gtctatcagc taggccaagg 360

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ccgacgacct gatgggcatg ctcgagatgg ccggcg 456

<210> 2943
 <211> 459
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-006-Q1-E1-B8

<400> 2943

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 gacatctcca agtggaggca gctgtggcca acagacgtcc tgnagtaagc aggagccgca 180
 tcccttctca caccgagatt gatccatcgc tcaaatgaca cgcctttctt tcatcatatt 240
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 tgacaacaga tccttggtcg gttatttcta atacatacgg attggatgag attggaaaag 360
 attaagacga agttaaaactt gtttgcaatt cagacacatc caatctcatt cagttcacat 420
 ggattgacag ctaaccgatc aaccctgtag ttggacaag 459

<210> 2944
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-B9

<400> 2944

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 ttggtcgctc acggcctgca ggtgggggtc tatggcaaga cgtgcccggc ggccgaaggc 180
 gtcacgacgc acatcgtcaa caacgaaatc gctatggacc ggggcatctc ccctggcctc 240
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 gagtcgcccg ccggcgacgt cccagagaag gagtcgtccg ccaacggctt caccctggtc 360
 gggctcagaa ccatcgacat cgccaagtcc accgtacagg gcatgtgccc cggc 414

<210> 2945
 <211> 438
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-006-Q1-E1-C1

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tttcctcttt caacaaggat tccggtgcct tgtttcacaa gacanaaaaa gtctcaaggg 180

tcttgattct tgtatgaact caagatttat ggtggatctt ggagctgtgg gatgctaagc 240

ctggtctagc tactagatta tgaactctct gctgatctaa tagcatttct acaagaattc 300

ttttgctgga aggtttatta gttatttgca acaatgaagg aacatctaata gcttaatat 360

gatgacctaa gcattcttga gcctaacgag gtcattggga cagtcaagaa taaatcatct 420

ggggaaacca ttgcacat 438

<210> 2946

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-C10

<400> 2946

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tcctcgctc catcccatcc cgccgccgcc gtctctacgg tcgctaataa gccgccgcat 120

ccaggggatgg agatgaagaa gatcgcttgc gccgtcctcg tcgccgctc ggccaccgtg 180

gcgctggccg cggaggcgcc ggctccgtcc cccaccagcg gtcctccgc ggtcgcaccc 240

gccatcgctg gggccgccgt ggctccttc ttccgtact acattcactg agccgccgga 300

cgaggagccg gactgccgga gggaagagac caaggggggg agagacttgg ctgcgctgcg 360

ctgctctgct gtcgccgcg attcccgatg cgtgggtggg tgtgctctga ttgggcacgg 420

cagtggcaca ccttcgtctt c 441

<210> 2947

<211> 218

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-006-Q1-E1-C11

<400> 2947

ggtaccggtc cagaattcnc gggccgaccc acgcgtccag cggaaggccg ccgtgcccgt 60
tcttcccacc tgcagcaacc ggccattgcc cgcgggttgcg ttgcatttgc atgggtgccc 120
gctgcgctct ggaaccttgc actaccggtt cggcggccta ggcgcggggc atcttccgag 180
tgcgtagcgtc tctgtacacg ctcagatcct ctctcggg 218

<210> 2948
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-C12

<400> 2948

ccacgcgtcc acccagcgt ccgcggacgc gtgggctgta gtccttgcca aggcacccga 60
gtctgctgcc acgagaactg ccccgctaa ggcacctcaa gccgcctcca ccccgccgt 120
tgccgctgcc ccatcgtcgt cgtcgtctac gaagtctggt ccatctgccg cgccgaccat 180
cgccgcctct acaccgtctt cttccacgga cgaggagtgt agcccttccc cgtcggcatc 240
caccgccgag gtggcgctcc ctgccgctga tgggcctgct gagggaccg cggctgctga 300
tgctccggt gctgctaccc ttggtagcgg agctgccatc gctggtgtcg ccgctgctgt 360
cgctaccatg atcttctact gagttcacca atgaccgtgt cgtcgagggt gggcac 416

<210> 2949
<211> 361
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-C2

<400> 2949

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cccgtcgccg ggatcccgcc ggtgacaatg gtgagggtggc tgccgccgcc gccgccagcg 120
gacggcgaga tacccttcgg acacgacgcc gtcgccttgt ccttcttcgt ggcgtgtgtg 180

gccgccaccg tcgcgctcgc gtcgtccatg tgctcggcat gcggtcgcaa gccgaaggcg 240
gccacccgtg cagacccggc cgcttcggac cagtcaccg ggacgggctc gggctccgtc 300
tccggtggcg gcggaagcca ggaggctagc gccgcggagg cggaggagga agtggtgaga 360
c 361

<210> 2950
<211> 297
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-006-Q1-E1-C4
<400> 2950

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ggtgctgcag tgctcgtcg aggactcgac catcagggca gccatggggc acgtcgtcgt 120
ctcgtcgcag tacctcacia tcgcgcagga gcacgacgat gccaccggg ctgcgcgcac 180
gtacccactc gatcacgctc aggctgcggc gctcaacatc cgggatctga acgctcatct 240
ccgcatgtcc gccttgctc tacacgagtg agtaccata ttcataatcg atcatct 297

<210> 2951
<211> 439
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-006-Q1-E1-C5
<400> 2951

aattcccggg ccgaccacg cgtccacca cgcgtccggc cctttcccca cctcgatctc 60
gcgctaggtt ttgccacac cgctctcgtc ctccgcgaag atgccgaaga acaagggtaa 120
gggaggcaag aaccggaagc gtggaaagaa cgaggctgac gacgacaagc gcgagctcgt 180
cttcaaggaa gacgggcagg agtatgcgca ggtgacccgg atgctcggca acgggcgggtg 240
cgaggccacc tgcgtggacg gcacgcgtcg cctctgccat atccggggca agatgcacaa 300
gaagggtgtg atcgcggccg gggacatcgt cctcgtcggc ctccgcgact accaggacga 360
caaggccgac gtcacctca agtacatgaa cgacgaagcg cgctgctca aggcctacgg 420
tgagcttccc gagacgctc 439

<210> 2952
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-C6

<400> 2952

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actacgctcc ggggtccagc ggcgccggtg ccggaggagg tggcctcgcc gactgggcgc 120
gccaccgcaa gcgtcgccgt gaggagctcc tcaaggagaa agaacttaca actcacatgt 180
cagaccaaac aaattgcaat gaagttgaag cagaagagtg tgatgcgtat gaagaaaatc 240
aagaggaacc tgtagcaatg gtagaagaat ctccaccgca tgttggccaa gatggtgatg 300
atgggcaagg tattgattcg tcttggactg tggttggtac accagtttta cgagtcaaga 360
caatttatat cagttcagcg attcttgctg cgaagagtc tttctttatc aagcttttct 420
aaaacggcat gaaagaatcg 440

<210> 2953
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-C7

<400> 2953

aattccccggg ccgacccacg cgtccaccgg gaactgcata ccgatgtcct cgccgggggat 60
gactacgctc cggggtccag cggtgccggt gccggatgag gtggcctcgc ccaactgggcg 120
cgccatcgca aacgtcgccg tgaggagctc ctcaacgaga aacgaatcta caactcacat 180
gtcacaccaa acaaattgca atgaacttga agcacaagag tgtggtgctg atgaagaaac 240
tcaagaggaa cctgtatcaa tgggtacaaga gtctccacc gatgttggtg aagatgggtga 300
tgatgggcaa tgtattgatt cgtcttggac tgtggttggg acaccagttt tactagtcaa 360
gataatttag atcagttcat cgattcttgc tg 392

<210> 2954
<211> 446
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-C9

<400> 2954

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tgctgtggca gacgtacgtc gatgagcacc tcatgtgcga gatcgagggc caccaccta 180

gctctgccgc catagtccgc cacgacggcg ccgtttgggc ccagagcacc gcattcccac 240

agttcaagcc agaggagatg accaacaatca ttaaggactt cgacgagcct gggtttctgg 300

ccccgatcgg cctcttccctt ggccccacca agtacatggt catccaaggc gagccccggc 360

ctgtcatccg cgggaagaag ggatctggag gcataactgt gaagaagacc ggacaggcgc 420

tggtgatcgg catctacgac gagccc 446

<210> 2955

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-D1

<400> 2955

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gaagatgaag gccaggaagg agatcggcgg gctggtggac ctctgtaacg atatttcggc 120

caagtcagag gagagcctaa gggtttagcaa ccaaaacatg cccagcaggg cgctgacgtt 180

cagtcagctg agcgccgcaa cggacggggt cagttcgcag aaectgctcg gagaaggcgg 240

ctttggacgg gtgtacaaag ggctcctcga ggacaccgga gaggttatcg ccgtgaagca 300

gctgaacagg gacgggctcc agggcaacgg cgagttcctc gtcgaggtgc tgatgctcag 360

cctcctgcac caccgaacc tcgtcaagct gctgggctac agcaccgact ccaaccagcg 420

gatcctggtc tacgagtaca tgccc 445

<210> 2956

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-D10

<400> 2956

ccacgcgtcc acccacgcgt cgcgccacgc gtccgaaact ctttgatctt ctatctgaca 60
gaaggcaact attgatgagg gaagatggca agaaacaagt ttgcattgtt ggtctacagg 120
aatTTgaggt ttctgatgtt cagattgtca aggaatatat tgaaagaggg aatgcagcca 180
ggagcacagg gtcaacaggg gccaatgagg aatcatcaag gtcacacgct attctgcaac 240
tggctgtgaa gaagcatatc atagtaaaag ataccaggag acagagagat cgtgatgcta 300
atgaagctaa aaatacaaag gctgtgggga aaatatcatt tattgatctt gctggaagtg 360
agcgtggtgc tgatactact gataatgata gacagacaaa gat 403

<210> 2957

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-D12

<400> 2957

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catgcatgca tgtgacgacc tctcctctc gctgtctctc tgtatctgca actgcaagca 120
aggaaattaa ttaaaagaag atcggcgcca tggcggcaac gacgacgggg atgcagatga 180
tgcaggcggc ggcgTtgctg ctgtgcttg tTgtgttggc ggcgTctacg cgggtcgcgc 240
tgggcaactg ccgcgacgac tgcatggctg catgcaacgg ctggaccatc gtctgccagc 300
tctcctgtgc cagcgcagtc tacggagaag tcgggatcac aaccttaggt acgtcggctg 360
tattagcgaa agcagaagcg cctgcatcag caccacaagc agcacaagag cgaggcgccg 420
ccgccggcgt gtccgcgctc 440

<210> 2958

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-D4

<400> 2958

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 tcacgtcaa gtgcgctaac agcctgccat gtcagggcgt gcacctcgtc aacgtcgaca 120
 tgtagtaciaa tggatacggg aacaagacca tggacgtctg catgaatgac atcggcaagt 180
 ccatcggatt ggcaaacgag ctggcggtgca tttgaaccaa ttgactatca ttcatatatt 240
 atgtactatg tttgtgcacg tgcgttgaca ctgaagttat acattagat caccctcatc 300
 tacgtaacga tagatatcac tatgagattc aaagtaagat acaaagaggg cggtcgctct 360
 acaggatcta aa 372

<210> 2959
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-D7

<400> 2959

gtaacggtct agaattcccc ggccgaccca cgcgtccagg acatctcagc atcagcttct 60
 gttgcatcag ggaacaaatt ctgcaagggt ggtgcctgtg atttctctga ttccagtaac 120
 tcctcgaaag atgccaaagga gagatccacg tccatgagga agcttataat cgcagtgatc 180
 ctttgcata tattcatgac ggtggaagtg gtcgggggca tcaaagcaaa cagtcttgcc 240
 atcttaactg atgcggcgca ccttctttct gatgtggcag catttgccat atcgttattc 300
 tctctctggg ctgctggatg ggaagcaaca ccgcagcagt catatgggtt cttccggatt 360
 gagattcttg gtgccttggg ctccattcag ctcatatggc tacttgctgg catactggta 420
 tatg 424

<210> 2960
 <211> 448
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-006-Q1-E1-E1

<400> 2960

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 ctgtccggag aggaggggca ggaggaggcc gcaccaaadc tatctgggga tcggagcgcg 120

ggcgacaaga tgccacgcgg cggcaagccc gcggcttcgt cgaagccgaa cccgttcgac 180
tcggactcgg actcggagtc cagcaataag ccggcgaaca agtccggggc gtcgtcgtac 240
caggcccccg ccgacgcaa gaagcggtag aaggacgggt tccgggactc gggcgggctg 300
gagaaccagt cgggtgcagga gctggagcac tacgcggcgt acaaggccga ggagacgacg 360
gacgcgctcg ccggctgcct gcgcacgcc gaggacatca ggcangacgc cagcgacacg 420
ctgatcacgc tgcacaagca gggggagc 448

<210> 2961

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E10

<400> 2961

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cgccgcgctc ttccggggccg cgccaaccat gttgtacatc acgccgaacc ttgtgtcctg 120
caacatcctg ctcaagggcc ttgttggcat cggtagacac gattctgcgc tgaaggtgct 180
cgacgaaatg actggatggg ggatcgctcc ggatgtcgtc acttacacga cggttctcac 240
tgctactgt gccaaagggg atctcgaggg tgcacagcag ctctttgacg atattattgc 300
cagtgggcgt aggccagatg ctactatgta cacagtgtc atagatgggt attgccatcg 360
taggaagttg caagatgcag caaggatcat ggatgagatg ggagctgctg ggggtgcagcc 420
aatgatgtt acatactctg tgggtga 446

<210> 2962

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E11

<400> 2962

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cgatcgaatt aggcgccttc ttcgtccac gtcctgtctt tatttgtaat ctgaagctta 120
caggaacatt tgagtggatc atggacggat tggtaggcct cttgaaagtc cgggtgggtga 180

ggggcatcaa ccttgccctac cgcgacgcaa gaggcagcga tccgtatgtc gtcctacgac 240
 ttggcaagaa gaaacttaag acgagcgtga agaagagatc tgtgaaccca atctggcacg 300
 aggagctaac tctgaccgtc aaagatccca gcctacctct gaagctggag gtgttcgaca 360
 aggacacgtt cagcagggac gaaccgatgg ggga 394

<210> 2963
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E12

<400> 2963

ccacgcgtcc acgctgatgc ttcgtctggg gccagaaga acatcttcaa gcagaagcct 60
 ccggaagccg atgccgctgc aagcagctgc tgtaacatg cttttgccat gctaattccg 120
 cgtcctcccg tggatgatga cgatgatata tttgtttggt gtgtcggttt attgtttctt 180
 cttcttttgg tctgtatat gctgaattta ttacaccac acataactgt acgttggcag 240
 cagctatata atatatcggt ttttgttggt aaaaaaaaaa aaaaaataa 300
 aaaaaaaaaa aaaaaataa aaaatgtaaa acaatgaaac tcacaaaaaa gaagtaaaaa 360
 aaaaggggcg gc 372

<210> 2964
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E5

<400> 2964

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 tagcaccaca cgcaggtagc aagaaggcga cgaacatggc gaggtggcc ttggtagcgg 120
 cgggtggttct gtgcctcctg ttagcgacag ggccgcaggg ggccatcagc gccgagggga 180
 tgggtgcatt tgacaatttg atcagctgca aggtactggg caactgcgac aagaacctgg 240
 gccccgaggc ctcccgccca gggaaacccg ccaacgacta cccccgggc tgcaacccga 300
 tcaccggctg tcgaggctga tcatatctct ctggtcgatg tgcgcgcaat gtcaatgtcg 360

cacgcgcgtg caggtaccag gcctcagcgt gtgggtgccg gtgtgtgtat atattacaca 420
catgcattat a 431

<210> 2965
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E6

<400> 2965

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gaggagatga ccaacatcat gaaggacttc gacgagcccg ggttctctggc cccgaccggc 120
ctcttctctg gccccaccaa gtacatggtc atccaaggcg agcccggcgc tgtcatccgc 180
gggaagaagg gatctggagg cataactgtg aagaagacag ggcaagcgat ggtggtcggc 240
atctacgacg agcccatgac ccccggccag tgcaacatgg tggtcgagag gctcggcgac 300
tacctcgtag agcaaggcct gtgaatggat tcatttaacc tcgctcgctc gcttgtccat 360
ggttcgagca tccagcagca acgataccaa catcagcatt atttaattgg tagcctcctc 420
tagctacgca cgca 434

<210> 2966
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E7

<400> 2966

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gttggttggt gccggccggg tactaccgcc tgcacgagca gcggctagcc acagcccaca 120
gacagacgac gtcaggtctt ggcaggtgtg caagcagaca gagctcgctc ggtcgccatg 180
tctttcaccg gcacgcagga caagtgcaaa gcctgcgaca agacgggtcca cttcatcgac 240
ctgctcaccg ccgacggcgt ctctgtaccac aagacctgct tcaaatgcag ccaactgcaag 300
ggcgtcctct cgattagcag ctactcttcc atggacggcg ttctgtactg caagacgcac 360
tttgaacagc tcttcaagga aacggggaac ttctccagga aattccaagg tggaggtgga 420

gcattcttcaa a

431

<210> 2967
<211> 443
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-006-Q1-E1-E8

<400> 2967

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cgaggagggtg gccagggttcc aggagggcgt ccggcagggc gccttcggcc tgctcctcaa 120
ctccgtcgtc ctccggagcca gctccttctt catcgagccc atgtgccgca agctcaccgc 180
caaggtcgtg tgggtcatga gcagcttctt cgtctcgtc gccatggcct tggtcaccgt 240
cctcagctcc tggtcgctcg ggcacatcgg gggcaacgtg caggacgccg ccgccgtgga 300
taagggcctc aagaccaccg cgctcgccat ctctgtcttc ctccgcttcn cattcgcggt 360
cctatgcagc gttccgtccg ccgtgacggc acagctggcg gcggccaagg gcggccggca 420
agggtgtgc acgggggtcc tca 443

<210> 2968
<211> 441
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-E9

<400> 2968

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gaataacaca gttgagcgcg acgatgggat ccctcgctaa taacatcatg gtcgtgggtg 120
tcgtccttgc agcgtcgtc gccggcgggt catgcgggcc cccgaagggt ccgcccggtc 180
ccaacatcac caccaactac aacggcaagt ggctcaccgc cagggccacc tggtacggtc 240
agcccaacgg tgccggcgct cctgacaacg gcggtgcgtg cgggatcaag aacgtgaacc 300
tgccacccta cagcggcatg acggcgtgcg gcaacgtccc catcttcaag gacggcaagg 360
gctgcgggtc atgctacgag gtgagatgca aggaaaaacc tgagtgtctg ggcaatccag 420

tcacggtgta catcactgac a

441

<210> 2969

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-F1

<400> 2969

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gtggccaccc caacgttggtc ggcctcgagg gcatcatcac ctcccgtcc tctccctcca 180

tctacctgt ctctgagtag ctcgagcag acctggccgg cctcagctcc tcccccgaca 240

tcaccttcac cgagccccag atcaagtgt acatgcgaca gctgctggag gggctggcgc 300

actgccatgc gcgcgggggtg atgcaccggg acatcaagtg cgccaaactg ctgggtaaca 360

acagcggcga gctc 374

<210> 2970

<211> 441

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-006-Q1-E1-F10

<400> 2970

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ataaaatgaa gcttattgcc ttgcgatgca gtagcatca tctctggacg acaacattgt 120

tggttttatt agaacactta atttgtgatg tctcgacata attgccggtc acttaaagga 180

ggagtgggct gctgcatttc tatgaaaact catatgtgag caaatgctac tctcctagt 240

acatctttaa tcattatggt ctcaaaaata ttggacgtaa gctatgacaa catttttctt 300

ttgaagatag aactgtcgt catttgatca accctatcta catgtgggtt gcgatatttc 360

catattatgt ggacagctta cacacagtta aatcagactg gatcaccaat ngatgaatca 420

taagcttgct ctgaacggga a 441

1277

<210>	2971
<211>	415
<212>	DNA
<213>	Zea mays

<223> Clone ID: LIB148-006-Q1-E1-F11

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caggatcagg	tcttcccaat	ggagctggcg	cataggttgg	agaggcatct	tggggagagt	120
tctagattag	tagtcgtaaa	aaacgctggg	cacgcggcca	atctagagaa	gtccaaggag	180
gtgtgcaaga	gcatcattga	ctattttcag	gaaccggggt	caagtgattg	agttgggggg	240
aaaggagggtg	aagccacaat	gtgacggttg	gaaattctga	gctaggacat	cgtcctgtga	300
ttggcccgcg	gtttttgccgt	ttccttggca	acttgtaatt	gtaacaaaag	aacctttgta	360
atcacacgga	ccatacaagt	ctctgtgtaa	ttgtctgagg	gctttctgcg	ctcaa	415

<223> Clone ID: LIB148-006-Q1-E1-F12

ccacgcgtcc	atttcaaagt	cacagatcaa	tctgtgggag	tatccaacca	acttcaacat	60
cttgcattcta	ttattcaggt	tcttgaccca	aagctacatg	accacctaca	aactcttggc	120
ggaagtgact	acctttttgc	gttcggaatg	ttcatgggtgc	tatttaggcg	tgaagtatca	180
tttgagagact	ccttatacct	ctgggagatg	atgtgggctc	tagaatacga	ccctgacatt	240
ttcttcgcaa	catgcgaaga	acaagggtgca	gtacataaaa	ataaagtttc	taaatccaaa	300
ctgaaaaggac	tgcgccattt	tggcaagtgg	gataaggaca			340

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<223>      unsure at all n locations
<223>      Clone ID: LIB148-006-01-E1-F2
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<400> 2973

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cgatgagagc cttgttctct ctggctctct tctgcatcgt gcatgggtgag aatgaagagt 120

caaagggcat cgatgcgaaa gcgtccgggc ctgggtgggtc cttcgacatc accaagttgg 180

gcgcctccgg caatggcaag acagacagca cgaacgctgt gcaggaggca tgggcatcgg 240

tgtgcggcgg cactgggaag cagacaatcc tcatacccaa aggtgacttc cttgtcggac 300

aactcaactt cacaggccct tgcaagggcg acgtgaccat ccagggtggat ggcaatctgc 360

tggcgaccac ggacctaagc cagtacaacg accatggtaa ttggatcgac attctacgtg 420

tggataacct gctcatcacc ggc 443

<210> 2974

<211> 370

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-006-Q1-E1-F3

<400> 2974

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tagttatgga cggattggta ggctcttga aagttcgcgt ggtccgggggt atcaaccttg 120

cctaccgcca cgcaagaggc agcgatccgt atgtcgtcct acggcttggc aagaagaaac 180

tgaagacaag cgtgaagaag agatccgtga accccatatg gcaagaggag ctaactctga 240

ccgtcacaga tcccagccaa ccactgaagc tggaggtggt cgacaaggac accttcagca 300

gagacgacnc catgggagac gcngacgtgg acgtggcgcc actgatggag gcggtgagca 360

tgaacccgcg 370

<210> 2975

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-F5

<400> 2975

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acctctcct	ccccgcg	ccaacaactc	agccgcccga	accgccacat	cagccatggg	120
cgctgcaca	tccaatccca	acacgcttga	tgggcaggcc	ccagctgagg	ccgcagtctc	180
cacacccaac	gttgcgcccg	acgccactct	aatctccgtt	gacgttgccg	ctgatgaaca	240
cgtaacctgat	aaagtgggtg	tggacgagcc	ggctgcggcg	gccgacgttg	agcatcagac	300
ggctaagtga	gtggtcgctc	cagaggcggc	cgtcgccgag	cccgatcaca	aggaggagga	360
acccttggat	aaaaccgtcg	tcaaggagga	caaccagcg	gaagccgcca	ttgcagagga	420
aaaggtctcc	accgccg					437

<210>	2978
<211>	453
<212>	DNA
<213>	Zea mays
<223>	Clone ID: LIB148-006-Q1-E1-F8
<400>	2978

tccgccggag ccgaaggcga aggcaacggc ggtttgaagg cgttggcga agcggccggc 180
 ggcgtatac caacccaac cgaggaagcc aatcacacc ggcctctgga gacacgaaga 240
 cccctttcga cacgcggcgg tcaactcaacc catagcgagg cagcgcaatc cacgcgtgcc 300
 gctgaggaga cgacgacgac tctttcgaca ggcggcgggg gttacggcgg tgcaaccggc 360
 aaggcttcca caagcggcgg cgggctggac cccgacggcg acccagaggt tgggctg 417

<210> 2980
 <211> 337
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-057-Q1-E1-E4

<400> 2980
 cgggtcgacc cacgcgtcca ggaacgctaa aaactgggaa tgggcctaca gccaagtacg 60
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 ctgaatttta tgccgtttca gattcgtgga gaaatgcaag taccctgagg atggttcacc 180
 gcctagatcc ttgagatata tcggaagtat ggttgctgat gtccatcgca cttactata 240
 cgggggcata tttttgtacc cagcagacca gaagagtcca aacgggaaac tacgcgttct 300
 gtatgaagtc ttcccgatgt cattcctgat ggaacaa 337

<210> 2981
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-E6

<400> 2981
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 agcaaggggg cccctttctg taccagagcc tcagatcgtg atttcgtcat aagccacgct 120
 gaattttatg ccgtttcaga ttcgtggata agtgcaagta tcctgaagat ggttcaccgc 180
 ctagatccct gagatatatc ggtagtatgg ttgctgatgt ccatcgcacc ttactagacg 240
 ggggcatatt tttgtacca gcagaccaga agagtccaga cgggaaacta cgcgttctgt 300

atgaagtctt cccgatgtca ttcctgatgg aacaagctgg aggccaggct ttcacaggca 360
aacaagggt gtgtttcagt ttcccggtct cagaccccaa tccccaactg aaaaatcttg 420
atg 423

<210> 2982
<211> 281
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-E7

<400> 2982

tagtgagtcg tattatcaac ggcattctcc acagggaccc cgagaccccc gtgaagctcg 60
ctgaatactt caacgtcacc gacgggggtgt tcagctacaa ccagatgggc gacgtgcccc 120
ccgccgtgaa cgggtcccctc catgtcatcc ccaatgtcat caccgccgag ttccgcacct 180
tcacgcagat cgtcttcgag aaccccgaga agagcacaaa ctccctccac gtctatggct 240
aggccttctt cggcgtcggc gatgggcccc gggaagtggc c 281

<210> 2983
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-E8

<400> 2983

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tctctcttct tcttcttctt caatctctcc tcccgcgct ggagttggag gagggagagg 120
ggacaagctt tccggcgccg acgccgacgc ggaccccgcg ccgacacgat ccggtggatc 180
aagtgcacat caccttttagg gagggccctt ggacagcagt ttgtgctgca aattctatat 240
agctctgtcg cagcatggcc tcggtgggcg tggcacgctc ttctttggga ttccagaatg 300
gcacaagttc tagcaatgac ccagatcgtc ttcccaacga gttgggcagt atgagcataa 360
gggacgacaa ggacgttgaa gatattgtag tcaatggcaa tggggcggag cctggtcata 420
tcatagtgac c 431

<210> 2984

<211> 182
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-E9

 <400> 2984

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 catgcattgc cgatcgccga cgtaccatcg cgccaacgag agagagggat ggagatgatg 120
 acgaggatcc tcagcgggtgc ggcgcgcgct gtcggcatgt cgggaaccgc ggtggggggcg 180
 tc 182

<210> 2985
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-F1

 <400> 2985

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 gccttgcttc ctctcctccc ggttcccgaa taaaatttcc tggaccggga gcgcgcagcg 120
 cgctcccccg cctcccaagg aaacttatct aagcattccg gcggtcgatc catcttcccg 180
 tccagggaga gcaaggaata atcaatcaac cggccagtga aacgttagga ggaggaggag 240
 agccggagtc cgtccagcgc ggcgcggggt gatcccttgc gtctccgccc ctgcccctgc 300
 gcatggccca acagtgccaa ccaagcacat cggtcacggg tcagtcagcc acgggagaag 360
 gcgcgacgat cgatatggcc aaaagtggac cgacagtaat ggcggcagca ggcgggccgga 420
 agcagcagtc aaattgtctg c 441

<210> 2986
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-F10

 <400> 2986

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gacgggagggc gagggcgcgcg cgagccggcg ggcgcaatcg gatttgggga ggcaaaagga 120
aaattccgga gagcagttcc tttccgcctc cccatttccct ccggatagat ttgggtttgt 180
cctgcgtcga ttagtccggc gcccgaacct gcaccaatcc attcgccgag ggatcgagca 240
agcgaggcgt ggaatcgagc gcggtattcc ctgcctgcct cttcttctcc tccgcctgtt 300
cttgccgcg tctccccctc cggccgatct ggactcgaca gatcattatt tttttgttgg 360
catacattcc caaccttgat ataaagacct ctttcattca gaagcctgtg ttttgg 416

<210> 2987

<211> 283

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-F2

<400> 2987

agtgagtcgt attagcgacc aactactgcg ttgtctcgcc tcatccaggt tctcgaacac 60
aattgcgtgg agccggagcg cacaccgcgc tcaccacct cacaaggaga cgtatctaga 120
cattccggcg gtcgatccat cttcccgtcg atggagagca aggaatagtc gatgtacagg 180
ggagtgtgac gttaggatga ggaggagatg ttgtgtccgt cgagcgcggc gcaggttgcc 240
tcgttgcgtc gcaggcggtg cggcggtgaca gtggggagga atg 283

<210> 2988

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-F3

<400> 2988

cgggtcgacc cacgcgtcta ctctgtctct ctacagtgt tctgctcgcc ggcccaaaat 60
cgctcatcg accacgcccc cttccaggct cccgtctcca tgggtctcct ctcaaacagg 120
attgggaggg agagcctcaa ggcgggggat catatctact cctggagggc ggcgtgggtc 180
tacgcgcatac acggaatata tgtgggcgat gataaggtga tccatttcac aagaggaaga 240
ggacaggagg tcggaacagg aactgtcgtc gatattattc ttgtgagttc cccccaaaa 300
cgaagcaaca cgccttgccc ggtgtgcacc gacgaaacca gcgacagcag cacagagacg 360

aacggcgtgg tatectctg cctcagctgc ttctagctg ggggtgctct ctaccgtttc 420
gagtacgcag tcaac 435

<210> 2989
<211> 188
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-F5

<400> 2989

ttacaacacc ctatagttag tegtattaag cgcgcgccgt gcatcatcgc ctcaccgttc 60
aggacgtcga actacgagga cgtggcgcg ggaccgcgct cagacacgaa tgggagggag 120
agctccaagg acggcggatg gtctctacac ctggacgggc agggtagagt caacgcatat 180
tcaggaat 188

<210> 2990
<211> 412
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-057-Q1-E1-F6

<400> 2990

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tgtaggtttc tgaatcatag cttggcgatg cctgaggcta gacaaatact gagctagcct 120
tcagaaaaaa aagaaaagaa agagattgag aagcagggag aaaaaatggc actggcccat 180
tgaggaagct tgagaaccag ttaacaagaa ttgccaatat attcttggac aatcttggtta 240
acagagtttt aaggtttcnc ancagacatt tttcgagtcc aggaagagcg cgtgcaacca 300
ccacattcat ataattaata agcaaggttc agagaaaaag caaatgggca caaagaatga 360
ataaagggat cctgaagccg ttccgccata tctcaaccat catggatggt aa 412

<210> 2991
<211> 334
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-F7

<400> 2991

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ccacaagggc ctgcactact tcaagggctg cctcatccgg ggcagcgtcg acttcatctt 120
cggttcggc cgcagcttct acaaggactg ccgcatcgag tcggtggtca aggaggtggc 180
ggtgctgacg ggcgagcagc gttccaagtc catcgagggc gccatcgaca ccggcttctc 240
gttcaagaac tgcagcatcg gggcggtcaa gggcgccag atctacctgg gccgcgcctg 300
gggggactcc tcccgggtcg tctactcgta cacg 334

<210> 2992

<211> 86

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-F8

<400> 2992

tactccctat agtgagtcgt attaatgcgc agcggcgacg gcggggcgcc ggcgggccgcg 60
acgtccgttg tggcgccgt ggggcc 86

<210> 2993

<211> 316

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-F9

<400> 2993

tcctatagtg agtcgtatta cgggacgcct ccaagaaaca cgtaaactgt gagccgctgc 60
tctcaacgag gaagtcacga cggccgccac gcccgaggca cggatggcgc tgaacctctg 120
caagacctac tacctggacg ccgccgacaa cctcggcgcc tgcaagcgcg ccatcggtt 180
ccgcgacgcc gtcaccatcc gcgccacgat tagcatggtg gcgcaggaca cgcataactg 240
cgacgaggag ttcattgaacg ccgtctccaa gaaccgcgtg gaggaccaca acaggtcgct 300
catcgagatg tccgag 316

<210> 2994

<211> 421

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-G1

 <400> 2994

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 ctgcttttacg ctgtgcccga gaaatgattg gggtaaccga tggatccaag aacttgatcc 120
 gtgctattaa caacaggctc agtgctctgt catttcacat cagggagtat tattgggttg 180
 atatgaagaa gataaatgag atttatcgct ataagactga ggagtattcc catgatgcta 240
 ttaacaaatt caacatctac ccagagcaaa ttccatcttg gcttgacagac tggattcctg 300
 tgaaaggcgg ttaccttata ggcaatctgc agccagctca catggatttc aggtttttct 360
 ccctaaggaa tctgtgggcg attgtcccat ctcttgctac tcaaaggcaa gcagagggta 420
 t 421

<210> 2995
 <211> 133
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-G10

 <400> 2995

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 gtccctctgt tccgcgcgcga cagtgtcggc ctgcggccca tgctgcggac gagcgcggat 120
 ggcattgccg cgt 133

<210> 2996
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-057-Q1-E1-G11

 <400> 2996

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aacaactccg tgtcactggg tttgcgaatt gctgatttct ctggatcatgc aagaaatatt 180
catttccctct tctacttggg ctctgataca gctatgtctg tagctgctga aatgggttgaa 240
caattggagt tagcggactg cgacgttact ttcattgctg attttattga ccttttgata 300
gtgaatctta ttccgggttg gagacctgta aatgatgcag cagcgaactc gtataggcga 360
tctgaaagtg aacttgcagt caattcncat cagaacatct caaagttggg acctgattat 420
gcattaattg atggg 435

<210> 2997
<211> 430
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-057-Q1-E1-G12

<400> 2997

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gcggtggcgt cagctgaggg ggcacggggg gacgtggaga tgggtttcct caaggccgcg 120
gtggccaaag gcgcagtgtg cttggacggc agcccaccgg tgtaccattt ctctcccggc 180
tccggttctg gcgccaataa ctgggtcgtc cacatggagg gaggagggtg gtgcaggaat 240
cctgatgagt gtgctgtccg caagggcaac ttcaggggct cctccaaatt tatgaagcca 300
ctctcgtttt cagggatatt angcggcaac caaaaatcca atcctgattt ctacaactgg 360
aatagagtaa agatcagata ctgtgatggg tcatcattta ctggtgacgt tgaggctgtg 420
gacactgcga 430

<210> 2998
<211> 187
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-G2

<400> 2998

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atcgacctga ccgccgcga gccgctcagc cggggcggca cgccgggggtg cagccccgaga 120
ggcagcgggtg acttgagcat gtgggtccctg gggaaagacc gcgggttcgt catgtccgcc 180

gcggtcc

187

<210> 2999
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-G3

<400> 2999

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cgtggccttg ctgagcgtgg ccctagtggg cctgctctc tgccacctcg ccaccaccgc 120
ctccgcccac cagaaagaca tccacgtcct cggcagcgtc gacgggtcca gcgacggcag 180
cagccccgag tccgaaggcc gcgtcgtcta cgcgacatg aagctggctg atacggaatc 240
cgatgcgccg gcgcgcggcg cggcgcggg gccgtcgtcc ggttgaactg agaagcgtgc 300
gtccagccaa gcaaggtggt caaaaccgag aactaattaa gggctcgatc gtgtgtcagg 360
ctactactgt tcttgccata attatatata gatacgcaaa gtgtggccaa gcctaccac 420
atgca 425

<210> 3000
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-G4

<400> 3000

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ccatcatcag ccagggaac cgctacatcg cgccgcccac ccttgccgcg aagcagggtca 120
ccaagcagca tgacacgccg gagtcggtgt ggaagaactg ggtgtggcac tccgagaacg 180
acctttcat ggaaggcgcc tacttcaccg tcaccggcgg ccagatcaac aggcagttca 240
acaagaagga cctcatcaag ccaggaacg ggtcctacgt caccaggctc acgcgctacg 300
ccggtccct cgctgcacg cccggcaagc cctgctagat caagccacca gcgaggacgg 360
ccgacgacca gaagcagacc atgcattcgc cggctcgcca tgtaagaaac agggga 416

<210> 3001
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-057-Q1-E1-G6

 <400> 3001

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 tccctcaggc ctttgcccg ctagcgctg tttacggtgg cacgtacatg ctgaacaagc 120
 cagaatgcaa ggctcgagttt gatgagagtg gaaaagcgta tggagtcact tctgaagggg 180
 agaccgcaa gtgcaagaag atcgtctgcg atccttcgta tttgccagac aaggtgaaga 240
 aggttgaag ggtggcccg gcgatatgca tcatgaagca tccgatcccg gacaccaagg 300
 actcgactc cgtgcagatc atcctcncca agaagcagct aaagcgcaa tccgacatgt 360
 acgtgttctg ctgtcctac gncacaacg tcgcgccaa aggcaagttc atcgcttctg 420
 tctccacg 428

<210> 3002
 <211> 309
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-057-Q1-E1-G7

 <400> 3002

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 cctgagcgct gttgtacgtg gcacgtacat gctgtcacia gccatagtgc aaagtcgagt 120
 ttggtggtat tggtaaatacg tatgggggtca cttctgagcg ggagaccgcc agatgcatga 180
 agatcatctg cgatccttcg tatttgccat gcaaggtgaa gaaagttgga aggggtggccc 240
 acgccatatg catcactaag catccgatcc cggacaccat tgactcgac tccgtgcaga 300
 tcatcctcc 309

<210> 3003
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-G8

<400> 3003

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ggcactgctg gtcaagtacg tcgacggcga cggtgacatt gtggcagtgg acgtcaagga 120
gaaggggctcc gacacatacg agcccctgaa gcactcctgg ggcgccatct ggaggaagga 180
cagcgacaaa ccgcttaagg gacccctcac cgtccgcctc actaccgatg gaggcaccaa 240
gtccgtctac gacgatgtca tccctgccaa ctggaaggcc aacaccgcct acaccgcaa 300
ataattaact ttagtgctga caatacttta agccgaccta tgctagctat actagattgg 360
gttgatccc aagcaatgca ttacacatgc atgcattgga ccgtgatatc tatttgctac 420
cactacc 427

<210> 3004

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-057-Q1-E1-H10

<400> 3004

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ggcttgggtga attggaggag aaggtagagg caattgaagc aaagccatcc caagtgccat 120
ttgaaaagca ggaattgttg catactttcg ttaaccgcgt gggtgtgttg gaagctgaac 180
taatttctat gaagaagggtc ttgtatgaga cattggttcg gcaggatgag ctgcttgcac 240
atattgacca acgacgggca gccaaatttt gtcggcagaa gttctgcttc tgagtgtgta 300
agtacctgcc acctatgttc ttctattcgg agttggcatg ctgctattgt ggacacagaa 360
tacttgcaaa tatcttcata ttttggtgcg gtgtanagaa ttgcaata 408

<210> 3005

<211> 428

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-057-Q1-E1-H12

<400> 3005

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gccaaagctcg tcaaggctcg cgcagcgcgg ccgtactctg tgtccatcat ggagatcagc 120

gagcccattt tgccggccgc gttgccctcc cccgtcgcgg cggccggccg ccgcggaag 180

ggtggttaagc gcaagatcaa gccatcagcg gcaacccatg aggattccaa catgatcccg 240

cgcaagcccc tcgaagcagt ggtggtgggt aagggttaagg tggccaagga taccgtgtcc 300

gagtcanctg ctccaangcc cgccccgctc tccgccccctt agttgcgtgt tgggcgcccgc 360

tgcccgccgg gccccgggca acatgcgtcg tgtctgcgcg cgcacgcacg cattgaacgg 420

gagataga 428

<210> 3006

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-H4

<400> 3006

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tgtgttccac atgcaaggcc agagtacaca accgttgccc tacctgcagg caagagctgg 120

gcgacattag gtgcctggcg ctggagaaaag tcgccgagtc gctggagctc ccctgcaggt 180

actactcgct ggggtgcccc gagatcatgc cttactacag caagataaag cagaggcgcg 240

agtgcggcct gagaccgtac aactgcccct acgccggctc cgagtgcggc gcggccggcg 300

acatcccttc cctcgtctcc cacctgaggg acgaccacaa ggtggacatg cacagcggct 360

gcaccttcaa ccacagatac gtgaaatcca acccgcgga ggtggagaac gccacctgga 420

tgctgacggg gttccac 437

<210> 3007

<211> 62

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-H5

<400> 3007

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gc 62

<210> 3008
<211> 413
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-057-Q1-E1-H6

<400> 3008

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gctgctgctg ctgcctgtgc tgggtgctgt gcttctgtt gttcatcgtg gcggcgctgg 120
ccggcacggc cgcctacttc ttcttcgtgt acaagcccaa ggccgctcc tactccgtga 180
gcaacatgtc cgtctcgcag ttcgacttca gcacctccga cctgacgctg tacgtcaagc 240
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gtccccacac cgtggtctcc taccgcgga cgccgctgtg ctccgggaag ctcccgccct 360
tccttcaggg ctacangaac gtcaccgtca tggacatctc catggagggc cgc 413

<210> 3009
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-H7

<400> 3009

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ttgatgtgtg gatccgtcgc ggctgccgtc aagcatagac accaagaacc agacctcggg 120
gtggatcatc ggggtcgcgg aggtctactg gatggggtca agaagtatcc gggcaagtcg 180
tctctgggaa ccctgcttat tgctcgccgg atgctagcgc cgccgtggac tgcgcggtc 240
cgagaagtcg aggtcgtcgc gacatatccc aggaaccttc ggacttgga cgaagctgtc 300
cataatatgg aaagcatgat tgggacgaag gtcgaatcaa ttctgaagct atgcgcaagg 360
aagcttcggc tcagtagcag aaaaaggaac cgacctaaaa aggaaaaggc tatttagtcc 420
tcgatagatt gtccttaagt caattgt 447

<210> 3010
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-057-Q1-E1-H9

<400> 3010

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 gaatctaacc aagagggtacc tgcattggcta ttgcgctatg cagctcgtcc ttcttatggt 180
 ggtggtggtg gtgggaggaa ccggcgatca gggggaggga gccgctttgg tggccgtgac 240
 ttccgcaatg attcttcgtc atttggcaag gggggatccc gtggtggtgg tgactactat 300
 ggtggaggca gcagtgggtg ttatgggtgg ggcggacacg gtggagctgg ggctccgagt 360
 gcctgggatt gatgttacag ttgctcccaa gtagaggggt ctgccaagtt taggtcactt 420
 ttactctag ttcta 435

<210> 3011
 <211> 287
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-058-Q1-E1-A1

<400> 3011

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 gtgtgctgct gcttcccctg cgtcatggtg gaggtcgcgg tgctcgccac ggtgcgcgcg 180
 cccgcggcgc tgtgccgcaa ggccgcccgc gtgcgcaagg gccgcaaggg ctctgcctcc 240
 gggggccagg ccacggagat atacgagctc ctctgggacg acaccgg 287

<210> 3012
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A10

<400> 3012

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ggcggacgcg tcgggtccgt ggagagcggc aagttctggt tcccagctca cgtctacaac 120
cgcaagcatt cgcattgttg gttcatgatg tcatgctatg atgcagcgt catttaccat 180
ttcgatacgg acacattccg tgcaaggtag ccagcacacg gtcgacgaac cgtggtgttg 240
gaggatggcg tgcaatggga cagggtgagg gcaccgcctg ttgacaccct tgcgcatcac 300
ctgcacacct ctgactgcct gcatgatctc tggcccggcg accacatcga gattcagtgg 360
agaacgaata gagaattcgc atacggtctg gtggtatgga 400

<210> 3013

<211> 279

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A11

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ccccgctgac tggaagttcg gtgtcacgta ccaggcatcc aagaacttct aagtagccac 120
ttttctcct cttcttcaac ctgcatatgc ccacaagcaa ccatgcagat gataacatgc 180
atcatgcatg catattcatt ctttcgctca tgcattccga tatggtgccg gagttaaaaa 240
aatgtaaaac aatgtgcaaa ctcaaatac atcttaacc 279

<210> 3014

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A12

<400> 3014

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atacagcatg ctaataaccc tgagtgcacg tcgtgctcgt ctcgatggcg acgacgtccc 120
tctcggttcc ggaataccat atcaggtcgc aatgggcatg tgcacagtcg cctgcacggt 180

catcacagca gccgccacgg ccacagtggc cctcggtcgc gaaggcacgt gcgcataggg 240
 tgacgagctc ctccctcggg acgtcaacgg gcgtcggcac attactgggt acctccgtgc 300
 tcaccttctt cgcctactac ctgcagtaaa attaaaggag ggtcagatgg agatgctgct 360
 ggctgccagt gcctgtattc gggtggattc cgttta 396

<210> 3015

<211> 290

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A3

<400> 3015

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 ccctgtgcgc gccacccta tacaaggagt cgtgcgagaa gacactgtcc caggccacca 120
 atgggacctt gaacccaac gaggtgttcc acaacgtggc caagggtggc ctggagtcgg 180
 tccacacggc ggctcgagcag tccaagtcaa tcggcgatgc caatgccagc gactccatga 240
 ccgagagcgc gcgcgatgac tgcaagatgc tcctggagga cgccgccgac 290

<210> 3016

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A4

<400> 3016

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 agccgggggg cgccgatggc gctgcgacgg gcgtcctca gatcggcaga gatctctttc 120
 gaacgcaagt agccgggaga ttcggaatcc cgcgcgcgag ttgggcctag ccagctggcg 180
 tcgtagccgc actctgggag gcatgtgggt tcgagccgcg gagggtaggg gtaggggcgg 240
 gtttcagttg ttggcctggt gctgtatttc gcgtggatgat ggaatttaat ctcttccggg 300
 gcgacgggca tggttttaag ggaaaatttt tgggg 335

<210> 3017

<211> 280

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A5

<400> 3017

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gccatcgtag cgaaatagac atgtctgata gggcacagat gtcgtggcac gcatacgtag 120

gcgaccacct gatgtgcgag atcgacggcc agtacctcgc ggcgaggagc atcgtagggc 180

acgacggtgc cacctgcgcg cataacagag cagttccccg agttcaagac cgatgacatg 240

gccaacatca tgaatgactt cgacgagcct atgcacctcg 280

<210> 3018

<211> 277

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A6

<400> 3018

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acgctcgacc tcatcaccga ggcgtccggc accatgtccg caggcatcgc cctgccaccc 120

tccaacgccg gagegccttc ctacggcgcg gcggcgcttc ccgggggctc cgccgatgcc 180

cccgccggcg cctccgaggg ccttgcgagc gccagcgggc cgtctggtga cgacgcgccg 240

gcgtccggtg ctggtgccag cgcgtcggct ggctgat 277

<210> 3019

<211> 280

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A7

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ggcggcataa ggaagctccg cggcaacgat gacatctcca agtggaggca gctgtggcca 120

acagacgtcc tggagtaagc aggaaccgca tcccttctca caccgacatt gatccatcgc 180

tcaaatgaca cgcctttctt tcatcatcat attgacaaa ttcgtcgtct ctgtcgcgct 240

gttgtaaacg ggtagtaga agaacaaatc ccgtagctg

280

<210> 3020

<211> 272

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A8

<400> 3020

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tcgtcgggga cagctgattt cacacgacga gccggcgagc cggccggcat ttcgtcgtcg 120

gatggcgccg gcctcctcct cgcccgccgg cgtcgcgtgc ctgcctctgc tctgtctct 180

gtcctcgcgc ggccgctccg cggcgccagg ctggttccag gctaggcgtg ctctgtcaga 240

tgaccatggg agcggatatag tggcgcgatg gc 272

<210> 3021

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-A9

<400> 3021

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tccgtggaga ggggcaagtt ctggttcccg gctcaggtct acaaccgcga gcatgggcat 120

gttgggttca tgatgtcatg ctatgatgca gcgctcagtt acgatttcca tacggacaca 180

ttccgtgcaa ggtaccacc acacggtcga cgaaccgtgg tgttgaggga tggcgtgcaa 240

tgggacaggg tgagggcacc gcctgttgac acccttgccg atgacctgca cacctctgac 300

tgcttgcgtg agctccggcc cggcgaccac atcgagattc agtggagaag gaacaaagaa 360

ttcccatagc gctggtggta tggagttggt gggcacttgg agtcatgtga tggaagc 417

<210> 3022

<211> 315

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-B1

<400> 3022
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 cgtccacacg tccgtcttta tttgtaatct gaagcttaca ggaacatttg agtggatcat 120
 ggacggattg gtaggcctct tgaaagtcg ggtggtgagg ggcacaaacc ttgcctaccg 180
 cgacgcaaga ggcagcgatc cgtatgtcgt cctacgactt ggcaagaaga aacttaagac 240
 gagcgtgaag aagagatctg tgaaccccat ctggcacgag gagctaact cctggaaacc 300
 cccgggggttt tcccc 315

<210> 3023
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-B10

<400> 3023
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 cacgctccgt ctttatttct aatctgaagc ttacaggaac atttgagtgg atcatggacg 120
 gattggtaag cctcttgaaa gtccgggtgg tgaggggcat caaccttgcc taccgagacg 180
 caagaggcag cgatgcgtat gtcacatag gacttggcaa gaagaagctt acgacgagcg 240
 tgaagaagag atctgtgaac cccatctggc acgaggagct aactctgacc gtcacagatc 300
 gcagcctagc tctgaagctg gatgtgttcg acaaggacac gttcagcagg gacgacccga 360
 tgggggacgc ggagatcgac gtggcgccgc tgggtggatgc ggcgaacgc 409

<210> 3024
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-B11

<400> 3024
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 tgcaggagga gaaggctgca atgcagatgg aggtcttgca gtacctgagg atgatggaac 120
 agcaggctga ccacgaccac ctggcgattc aggacctgca cgatttgctt acggagaggg 180

agaaagagtt gcttgacttg gacgctgagc tcgcgactg caggaggctc ctgcagaacg 240
 atccgttcaa cggcgacgga cgtaataatg gcgctgacac agtgaacaca acgattgacg 300
 gcagaaatcc ggcgatcgaa tgcttggatg gcgcggacct tgtggggagc gccatgtcgc 360
 ttttcgaaga cgagaaggcg ttcatttttg agtccttgag cagactggag gaaaacct 418

<210> 3025

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-B12

<400> 3025

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 cagccggccc ctctggcctc gctgtctccc ctctctccc gtccccacc acatgccctg 120
 cctccgcccc gccccgccct gcccaagctg agttccccca cccccaacaa acaattacta 180
 gagtagctgc attggcgggg aaattaaagc gctagaagct cagcagcaat ggcgagcag 240
 gctggcgctca gaaggtactg gtgccacatg tgcgccgagg ccgttagccc cgcgatggc 300
 gacgtggaga tgaagtgcc gttctgccac agcggcttcc tcgaggagat ggagaccgcc 360
 cgcgccgccc cgaccgacga ctgtgacggc gacggcgctg tggctc 406

<210> 3026

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-B3

<400> 3026

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 ctacacaaa taataaggaa aggtcccgcc ctttctctcc gacatccaca aggggggagg 120
 ggaaaacacg tacattcacc cggcggcaat aatggcctcg gttccggctc cggcgacgac 180
 gaccgccgcc gtcactctat gcctatgcgt cgtcctctcc tgtgccgagg ctgacgaccc 240
 gaacctcccc gactacgtca tccaggggcg cgtgtactgc gacacctgcc gcgccggggt 300
 ttcggtttgg aaaaccccc aaaaaaac ccggggggtt tcccccaaa aaaccccc 359

<210> 3027
 <211> 300
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-B5

 <400> 3027

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 tgcgatggct gtgggtgttg tgttcttggg gagcggcgca tgggtgcggtc ctcccaaagt 120
 cccccaggc aagaacatca cggccaccta tggcaaggac tggctggacg ctaaagcgac 180
 atggtatggc aagccgacgg gtgccgggtcc cgacgacaac ggtgggtggct gcgggtacaa 240
 ggacgtgaac aagccccctt tcaatagcat gggcgcatgc ggcaacatcc ccatcttcaa 300

<210> 3028
 <211> 317
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-B6

 <400> 3028

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 agatgccacg cggcgggcaag cccgcgggtt cgtcgaagcc gaaccggttc gactcggact 180
 cggactcgga gtccagcaat aagccggcga acaagtccgg ggcgtcgtcg taccaggccc 240
 ccgccgacgc caagaagcgg tacaaggacg ggttccggga ctcgggcggg ctgggagaga 300
 cccaggttcc cggggggg 317

<210> 3029
 <211> 271
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-B8

 <400> 3029

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ccgtggaaac ccgcccacgc aaccttctac ggcgggcggtg acgggtccgg caccacggcg 120
 ggcgcggtgc ggtacaagga cacgcgcacg caggggtacg gcgtgcagac ggtggccgtg 180
 agcactgtgc tggtcggtga cggcgcgggc tgcgagggt gctacgaggt gcggtgcgtg 240
 gacagcccta gcgggtgcaa gcccgcgcg g 271

<210> 3030
 <211> 372
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-058-Q1-E1-C1

<400> 3030

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 gcaacaactc agccgcgcga accgccacat cagccatggg cgctgcgca accaagccca 120
 agacgcttga ggggcaggcc ccagctgagg ccgccgtctc cacaccaag gttgcgccc 180
 aggccactcc aatctccgtt gaggttgcgg ctgatgaaca ggtagctgag aaggtggtgg 240
 tggaggagcc ggctgcggcg gccgacgttg agcatcagaa ggctaagtag gtgctcgctc 300
 cagaggcggg ccgnttccgg ncccccggg gaaaggggcc ccccccccc cgggggaaaa 360
 aaaccccccc cc 372

<210> 3031
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C11

<400> 3031

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 gcggcttcgt cgaagccgaa cccgttcgac tcggactcgg actcggagtc cagcaataag 180
 ccggcgaaca agtccggggc gtcgtcgtag caggcccccg ccgacgcaa gaagcggtac 240
 aaggacgggt tccgggactc gggcgggctg gagaaccagt cggtcagga gctggagcac 300
 tacgcggcgt acaaggccga ggagacgac gacgcgctcg ccggctgcct gcgcatcgcc 360

gaggacatca ggcaggacgc cagcgacacg ctgatcacgc tgcacaagca gggggagca 419

<210> 3032

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C12

<400> 3032

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caccccgctc accttccagg ttggcaaggg atccaagcct ggccacctga tcctcacccc 180

caatgttgca accatatccg acgtggagat caaagagcac gggggcgatg acttctcctt 240

tacgctcaag gagggcccgga ccggcacctg gacgctcgac accaaggccc cgctcaagta 300

ccccctttgc atccgctttg ctgtcaagtc cgggtggctac cgcctcgctg acgacgtcat 360

ccccgctgat ttcaaggccg gcaccaccta taagaccaca ctcagcatct aatcag 416

<210> 3033

<211> 313

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C2

<400> 3033

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gaccaacaat taagcctccc cgaccgccac atctattaag tgcagccatg ggtgcctgtg 120

caacgaagcc taagacgctt gaggggaaag cccagctga ggccaccatc tccacacca 180

aggttgacc tgagaccact accatccaca ttgaggttgc ggcaaacat gcagtagttg 240

agaaggtgga ggaggacaag gaggaggcac taacagtggc ggcgaaacag gagccagcat 300

ccaccattga gcc 313

<210> 3034

<211> 275

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C5

<400> 3034

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tccagccggc cgatcatcctg cttctcctgc tcattgtgtc caccgatatg gcacaggcaa 120
gggaatgcga gaagtacagt gagcgatttg ttggggcatg catgatcgca gacaactgcy 180
ccaatgtgtg ccgcgggtgag ggcttcttgg ccggcaggtg cagcaccttc cgccgccgct 240
gcatctgcac taggcagtg taaacaagat cgctc 275

<210> 3035

<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C6

<400> 3035

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tcttctctcc tggcatggag gaagtagctg tttcgctat gatcgttgcc gccgtagtgc 120
tggacaacaa tggcgctgac gcggtctcct gactgccat ccctagcgta acaataagcc 180
tagaggagaa agaaaatata aatggggatg ttcccacgat cacctcggcc gcaagcaacg 240
aggaggaggc gttgttcagt gtcggagaat ccaccaagga cgatggccat cgctttgac 299

<210> 3036

<211> 300

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C7

<400> 3036

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cgtgagctcc tgtcagacgc ggcggtcggg agcaatccga ttctccgggt gatggccggc 120
accgtcttca tgcacgaacg cgattacgcc gaggtctca agcacaccaa ctccggtggc 180
agcatggagc tgcttgcgct gaatgttcag atataccttc aaatgaacag gacggaccac 240
gcagagaagc agctcagggg gatgcagcag ctggacgaag accacacgct gacgcagctc 300

<210> 3037
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-A12

<400> 3037

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 atcacgtaaa ttaatccgat gtaaaccgag aaccttacct ctccaagaag gtgttgcacg 180
 gctgtcgaaa gaacgtgctg tgaagtgaga gaacgtacga gaaagccaag tgaggaaaag 240
 aaggcaagta gagggcggcc cgagaaagga gagggcgtaa gacgtgatac agagtaggaa 300
 gaaaagagaa gagagctaga aaggaggtaa aagaagagta aaaggactag aagaggtacg 360
 gaattcacga ggaaggagcg tgaaggaagg aggaatccca agtaatcgag gaagaaaaag 420
 cttcgggtgaa agcgtgaacg gatattgtac acactgcc 458

<210> 3038
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-A2

<400> 3038

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 cgccctcgtg gcgttggtgt ctgccggcct cttcccgcag gcgttaggga acggcaaggg 120
 caaggtgcat ggcggcggtg ccgtcaacct gctggttgcc ggcacatctgt ctcgcgcccc 180
 attcccagag gtttgacagg ccacagccgg gcgccatgca tccaagtacc cggtcatcga 240
 ccatttgccc gtgctgaaca tgcaggtggc cggttcgcc aagcgcacag cgcaggcgcg 300
 gaagcacgtc gcggtggcgg ccgcactat tccaccgccg caggcacagg ccctcagaac 360
 ctgcgacacg atgtacatga acacgcagga cgccatcggc g 401

<210> 3039
 <211> 395

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-064-Q1-E1-A3

 <400> 3039

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 ctgatgcttc cccggtctca gctatcgggt ttgagggcta tgagaagcgc cttgagatca 120
 cattctctga ggcacctgtc tttgtggacc ctcatgggcg tggtttgctg gccctctcca 180
 gggcccagat tgactctgtt ctggatcttg cacggtgcac aattgtgtct gagctctcca 240
 acaaggattt cgactcatat gtcctttctg agtcaagctt gtttatctat cctctgaaga 300
 ttgtcatcaa gacctgtggc actaccaagc tctgtctcac cattccaaga atccttgagc 360
 ttgctgaaga gctgtctatg ccacttgctg ctgtg 395

<210> 3040
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-064-Q1-E1-A4

 <400> 3040

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 ctgcatcgtg catggtgaga aggaagagtc aaagggcatc gatgcgaaag cgtccggggc 120
 tgggtgggtcc ttcgacatca ccaagttggg cgcctccggc aatggcaaga cagacagcac 180
 gaaggctgtg caggaggcat gggcatcggc gtgcggcggc actgggaagc agacaatcct 240
 catacccaag ggcgacttcc ttgtcggaca actcaacttc acaggccctt gcaagggcga 300
 cgtgaccatc caggtggatg gcaatctgct ggcgaccacg gacctaagcc agtacaagga 360
 ccatggtaat tggatcgaga ttctacgcgt ggataacctg gtcatcacccg gc 412

<210> 3041
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-064-Q1-E1-A5

 <400> 3041

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attcttgttt ctctctctcg tcgcagcaga ggtgggaacc atcgatgcca aaatgggagt 180
agccatgccc atgcatgcct tgataatgga gaaagcgaag cagcaggaga cggagaagaa 240
ggaggagaaa agcacggaga aggaagagag tcaatgctta tcgccgagtc tccagttcga 300
gggcttctgc ttcaacagcg acagatgcgc cgagggtgtgc atgaaggaga gctttcccg 360
tggcgagtgc aagcgggacg tggccatgcc c 391

<210> 3042
<211> 425
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-064-Q1-E1-A6
<400> 3042

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ataaccctgc gtgcccttcg ttctcgtctc gatcccgacg acgctccctt cggtcccggc 120
aaaccacatc aagtcgcgat ggagatgaag aaggtcgcct gcgccgtcct cgccgccgcc 180
gcctccgcca ccgtggctct cgccgccgag gccccggcgc ccgccccac cagcgctcc 240
tcggcccggt tcccgccgt cgccgccgtg ctgggcgcct ccgtgctctc cttcttcgcc 300
tactacctgc agtaaaatta aaggagggtc ggaggagat gctgctggct gccattgcct 360
gtattcggtt ggattccgtt tatatatata tttaagtact ttaatttggg tctgaacatg 420
tccaa 425

<210> 3043
<211> 357
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-064-Q1-E1-A7
<400> 3043

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agccagctcg cgaaaataat gaagagccgc agcatggcat catcgccgc gctcttgggtg 120

ctagccctcg cgctagtggc ggccaccgcc ccacaggtag cggaggcaaa gaagaagaga 180
gcggcggaga gcggcgaggg ggcggaggcg aagaagatcc aggacgactt ctgctcgacg 240
ctgtgcgagg gcaagaaggg gacggacctg gtcgtgtgca aggagtccctg cgcgctctcc 300
cagcagtcca acctggtgct gtacggcagg atccagtgca agggcaagtg caccgag 357

<210> 3044
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-A8

<400> 3044

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gaaggtgccg cccggtccca acatcaccac caactacaac ggcaagtggc tcaccgccag 180
ggccacctgg tacggtcagc ccaacgggtg cggcgctcct gacaacggcg gtgctgctgcg 240
gatcaagaac gtgaacctgc caccctacag cggcatgacg gcgtgcggca acgtcccat 300
cttcaaggac ggcaagggtc gcggtctcatg ctacgaagtg agatgcaagg aaaaacctga 360
gtgctcgggc aatccagtca cgggtgtacat ca 392

<210> 3045
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-A9

<400> 3045

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ccttcgttct tctcgtctc gatcccgacg acgctccgtt cggtccggc aaaccacatc 120
aagtcgcgat ggagatgaag aaggtcgctt gcgccgtcct cgccgccgcc gcctccgcc 180
ccgtggtcct cgccgccgag gccccggcg cgcggccac cagcgctcc tcggccgcgt 240
tcccggccgt cggcgccgtg ctgggcgcct ccgtgctctc cttcttcgcc tactacctgc 300
agtaaaatta aaggaggatc ggaggagag gctgctggct gccattgcct gtaatcggtt 360

ggactccctt tatagataaa attacgtact ttaatttggg tccgaa

406

<210> 3046

<211> 352

<212> DNA

<213> Zea mays

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cccgggggaca gccagtccaa catggtgacg gcgcaagggc ggacggaccc caacatgccc 120

acgggcatcg tgctccaggg ctgccgcacg gtgccggagc aggcgctctt ccccgaccgc 180

ctccagatcg ccacctacct cggccgggccg tggaaggagt acgcgaggac ggtggtgatg 240

gagagcacca tcggcgacct catcaggccg gaaggggtggg cggagtggat gggcgacctc 300

ggcctcaaga cgctctacta cgccgagtac gccaacaccg gcccggggcgc cg 352

<210> 3047

<211> 459

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-B11

<400> 3047

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aaaacataaa atatgtcttt tcttttagaa cttttaaaag aaattcgctg gagaggactt 120

tggggaactt ttcaagcagc caaaatgaat agactgggta caatgaagta ctttgtcggc 180

gaagacgagt ttcacaaccg atactttcaa aaagtaaacg atgttatgtt gaaggatcgt 240

tgggtggaat atgctttctaa ggaattcacc cctgacctt attcgttacc tctgagtgg 300

catgcctggc tgcacatcat tatagatgag ccaccacaa aagtaggttt ccagagacca 360

aagtatcaag cacagatcgt cgcaaaccgt acaggcacia cagatgcgta ttttcccaag 420

aacaatcctc ttagtaagaa ctttaagggc ttggctaca 459

<210> 3048

<211> 481

<212>	DNA	
<213>	Zea mays	
<223>	Clone ID: LIB148-064-Q1-E1-B12	
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gaagaggaaa	acggttttgct gttggtatgt gactcgtaca	240
gattatggga	tagaagtaaa caacgatgaa gatgaagaag	300
aatgcggttg	aacaagtgaa tattgtggtc gagtcgtttg	360
agcaaaaag	actttcaagt aactatcaag cgttatagca	420
gagaagaaca	accggataga gtggaaaagt ttatggaagg	480
a		481

<210>	3049	
<211>	409	
<212>	DNA	
<213>	Zea mays	
<223>	Clone ID: LIB148-064-Q1-E1-B2	
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60		
cggattccta	ctacgaggta	cggtcagatt
gcacggacgg	tgtgccccaaa	aacaagttca
120		
agatcaaggc	tggcaaaaca	ttaagtgtc
ggaaatggca	ggctgcattt	agtcccgatg
180		
gctgtcttga	tattgcctca	gtcctaagcc
ggatacaaag	aggaggtgtc	catccgacag
240		
tcagaggaga	ggctctgggaa	ttcttacttg
gttgttttca	ttccagaagt	acctttgatg
300		
aaagggaaga	gataaggcaa	atacggagga
tacaatatga	cagatggaag	gaagattgtc
360		
gacagatgga	ttcgcattgtt	ggtagcggta
aagttatcac	agcaccact	
409		

<210>	3050
<211>	425
<212>	DNA
<213>	Zea mays

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tcaaggacga cctgtcggcg gggcgggctc tggacaaggg gttcgagttc gacgccacca 360
ccgcgcggtg cgtgacgttc ggggccagcg ggg 393

<210> 3055

<211> 483

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-C12

<400> 3055

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aaagtagaaa aactacaacc cgggacacag gggcacaact tgatcgttca agtgatgaac 180
gtcgggtgagg ttatggaaaa agtgagaccg agtggtgaca aactgcaaact cgccgaagtg 240
ctacttgcag atgaaactgg agcgggtatta tttacagcaa ggaacgaaca aatcaaactt 300
tttaaaaagg gagagtgtgt gaccgttcga aacgcaaag tcaatatggt gcgaggcttt 360
attcgtttag tagttgacaa atggggagct attaagccgc ctggaccaac ggaaaagtta 420
caaggaccac caaaagtaga aaacaatatt tccaacatag aatatgaact cgtgtaagac 480
act 483

<210> 3056

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-C2

<400> 3056

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gctcggcttc cccggttctt gagaggggaa agatgacgcg gacgatatgg atggggaggg 120
acgacaggtt ccagtggtg gaggccgcgc tcggcgtggt ggctcgccgc gccttcgccg 180
ctgggctcgt cgggggtttac ctttccatgc cggactccga ctacagcttc ctcaagctgc 240
cacgtaatct ccaggaactc caaatcctca ctggccatct tgagaactat actatcgact 300

<213>	Zea mays		
<223>	Clone ID: LIB148-064-Q1-E1-C6		
<400>	3059		
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	ccgaccacaa ggaggaggaa gccgtggaga agaccgtcgt cgaggaggag aagccagcgg		120
	cagcagccca tgcagaggaa aaggtcgccca ccgccgccga gaccacgacg acgggtggagg		180
	cgaagaagaa cgccgaggag gccgggaagg agaagctggc gcagcaaagc tgatcgactg		240
	tccgtgcatg cgtgcccaatt aatataattg gctgatgatg cctgatgttc agtgtgtgat		300
	actgtgatca agcaaggaga cgacacttga atttctctaca gtttggcata ggtcgggaga		360
	gacactctcg accggccaca ccatgtaaca aactaacctt cgatgtctcc caataatttc		420
	ctcaacggag ttctttctgat gaaac		445

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<212>	DNA	
<213>	Zea mays	
<223>	Clone ID: LIB148-064-Q1-E1-C7	
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taccaacaac	agcagcagca agcccccccg ttcgacgaca tggccccgcct cggcgccggc	120
gccgtgttg	cgctcctagt ggcggtcgcg gcggtggccg cgttcctcgc ggtgccggcc	180
tcggcgaa	gct ccggggagct gagcgcgatg gggttgctgg cggcgaaagg cggcagcggc	240
gcggggccc	gc agaagtgtc gggcgcggtg ggcgagtgcg acgtggacga ggcggaggag	300
ctcggggct	ga gcggcggcgg cctcggtccc gacgacgcgg tgcggcggac gctggcgag	360
cggaagccg	a ccaaccggt catcagcta	389

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<210>      3061
<211>      413
<212>      DNA
<213>      Zea mays

<223>      Clone ID: LIB148-064-01-E1-C8
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 tgcgccaccg ccgccgcggc gaccgtcgcg ccccgacccc ctcgccctgc tgcgtccgcg 240
 tccgtctcct tctccgcgag gaagccggcg ggccggcagcc tgcggctgca gcggcaggcg 300
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 gggagcgcgg ccgacctggc ccccggggg 389

<210> 3064
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-D10

<400> 3064

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 gggaatgttc cgtgatggac ataaagttgg tattgttttg acataacaca gtggtaggag 180
 ctgcgggtgg ttcgattatt actgcaaagt tgagtgtcgc caaagggttt attgcacaaa 240
 aaggaaaaca aagtgtatat gcggcagtat ctcgtcacta gtgtgtgtca ctagacagaa 300
 tagtgtgttt gtgttgtttg tgtctgtgtt ttccaatgaa agacattgac cactagaact 360
 atgtgaaaaa aaaattacag tcaaccacaa agactatc 398

<210> 3065
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-D12

<400> 3065

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 acgggtacag caccagattc taaaagatt ataggggatt ctggtcagga cgctacgttg 180
 aacggaactg gtaccgagaa agactacaat gttgactatt catgttcctg tcacatcctg 240
 taagttcagt ttgatacttt ctatctctgc gcatgatact cagcagctat actggttatg 300

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acgcttgat gc 372

<210> 3066
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-D2

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acacgtcctc gctccatggc gggcatgccc acggaaagcg cgaccggcg cttcgccgcc 180
gcgtgcggcg tgctcagcca gtacgtccgg acgaccggcg cgcccgcat gacgccgccg 240
ccgccgttcc tgaagccacc agccgccgc caggagacga cggtcgcgcc gcgcacgcag 300
cagctgacca ttttctacgg ctggagggtg gtgggtgctgg acgcctgccc ggccgacaag 360
gcggacgagc tgatccgcct cgccgcct 388

<210> 3067
<211> 359
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-D3

<400> 3067

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aactgcaaaa tcttcccaa cagcctggtg ctggacttcg tgacgaacgc ccagatccgc 180
ggcatcacgc tgctgaacag caagttcttc cacatgaaca ttttcgggag caagaacgtg 240
gtgatcgaca aggtgacgat caaggcccc ggcaacagcc ccaacacgga cggcatccac 300
atcggcgact cgagcaacgt gaccatcagc ggcaccacca tcgccgtcgg cgacgactg 359

<210> 3068
<211> 396

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-064-Q1-E1-D4

 <400> 3068

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 ccggcgccgt gttggcgctc ctagtggcgg tcgcggcggg ggccgcgttc ctgcgggtgc 180
 cggcctcggc gaagtccggg gagctgagcg cgatgggggt gctggcggcg aagggcggca 240
 gcggcgcggg cccgcagaag tgctcgggcg cggtagggcg gtgcgacgtg gacgaggcgg 300
 aggagctcgg gctgagcggc ggccggcctcg gctccgacga cgcggtgcgg cggacgctgg 360
 cgcagcggaa gccgaccaac cggtagatca gctacg 396

<210> 3069
 <211> 426
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-064-Q1-E1-D5

 <400> 3069

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 gacctaagcc agtacaagga tcatggtaat tggatcgaga ttctacgcgt ggacaacctt 180
 gtcattaccg gcaagggaaa gctcgacggg caggggccag ccgtgtggag caagaactcc 240
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 aacggggagg tgtccgggat cagctgctc aactccaagt tcttccacat gaacatccac 360
 aagtgaagg acatgctgat ccaggacgta aatttgacgg cccccgggga acgtccccac 420
 acggac 426

<210> 3070
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-064-Q1-E1-D6

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ccaggccaag ggcggccagt acgccgagtc gtcaccagg tacgccggcg cgctcaactg 240
ccgcgtcggc aggaagtgtt agtgcggtgt cagctctagg ctgcagcttt catcattggc 300
gatcgatcgt aacaatgcaa ggttgtgttg tatataactc ttgtgtttgg aatgccgccc 360
gtaattaatg gtcaactcta acactgcttg cctttaanaa aaa 403

<210> 3071

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-D7

<400> 3071

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gtggatcatg gacggattgg taggcctctt gaaagtccgg gtgggtgagg gcatcaacct 180
tgcctaccgc gacgcaagag gcagcgatcc gtatgtcgtc ctacgacttg gcaagaagaa 240
acttaagacg agcgtgaaga agagatctgt gaaccccatc tggcacgacg agctaactct 300
gaccgtcaca gatcccagcc tagctctgaa gctggagggt ttcgacaagg acacgttcag 360
cagggacgaa cccattgggg acgcgg 386

<210> 3072

<211> 235

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-D9

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gcggcccagc gccgcggcgt ctatatagag ccagatccgc gcgatccccg ccaatcggca 240
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 tgccttctcc tcgcaattgc cttcttcttg tatctagccc cccttcatca caatcaccgg 360
 cagcggcgcg ccgtcgtctc aggtgagagc tcca 394

<210> 3078
 <211> 400
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-064-Q1-E1-F1
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 acccggaat cctccagccc tctagtcccc aacgacgcag gaagcaggat cgagccgaat 180
 cctccggaac tcgcccgcgg ggccaaccga cctcacacta ttgatcgagg atgtcgtacg 240
 cctacctctt caagtacatc atcatcggcg acacaggcgt ggggaagtca tgcctgctgc 300
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<210> 3079
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-064-Q1-E1-F12
 <400> 3079

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 cgtcggcgtc ctttgggctc ttctccgggg agttcctccg ccggcacggg ctgcacctcc 180
 tgggcacgtc ctgcagctgg ttctgctgg acatcgctt ctactcgag aacctgttcc 240
 agaaggacat cttcagcgcg gtgggggtgga tccccaaggc ggcgacgatg aacgcgctgg 300
 aggagctgtt cagcatcgcg cgggcgcagt ccctgatcgc gctgtgcggc acggtgcccc 360

gctactgggtt cacggtggcg ctgatcgacg tgttgggg

398

<210> 3080

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-F4

<400> 3080

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gccatggacg tggactgcgt ctcgctgccc gacgccccgg cgggcgacgt ggatggcggc 120

gccgccccgc cgtggcccaa ggccgtcacc aacggcgggc tccacgagct gctggagtgc 180

cccgtgtgca ccaactccat gttcccgcg atccaccagt gcccgaatgg acacacgctg 240

tgttccacat gcaaggccag agtacacaac cgttgcccta cctgcaggca agagctgggc 300

gacatcaggt gcctggcgct ggagaaagtc gccgagtcgc tggagctccc ctgcaggtac 360

tactcgctgg ggtgcccga gatcatgccg tactacagca aga 403

<210> 3081

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-F5

<400> 3081

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gtcagtattg gatttttagtt gccctgttga cagttttgga gagatttgga gattttacaa 120

tatcatggct accgttttac tcagaagcaa aggtgttggt ctttgtatat ttgtggtacc 180

ctaagacaaa gggaactacg tatgtttatg gaactttctt taagccatat atttctcagc 240

atgagaatga aatcgaccga aatcttcttg agctcagagc tcgagccacc gatatgggtg 300

tcctttactt ccataaggct gcttcggtag ggcaaaatac tttctttgac gttttaaaat 360

atgttgctgc ccagtcacct tctcggaat c 391

<210> 3082

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-F6

<400> 3082

atgcccgggt cgacccacga gtccaccac gcgtccgccc ggcgctccct ttgccgtggt 60

gggggcgggc cggccgcggt gcgtcgtcc gcgccgcgc ccgcgccgtc cgcgcggcgc 120

tacggcccc gagccagtgg tccgtcggga gctggcgggg ccgcccggcg cagcagcagc 180

ccgagtaccc ggacaaggcg gacctggaag acgtgctgcg gacggtggga acgttccccgc 240

ccatcgtctt cgccggcgag gcgcgcaccc tcgaggagcg cctcgcggag gccgccgtcg 300

gccgggcctt cctcctccag ggcggcgact gcgccgagag cttcaaggag ttcaacgcca 360

acaacatcag ggacaccttc cgcgtcctcc tgcaaagtgc cgttgtgctc atgt 414

<210> 3083

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-F7

<400> 3083

accacgcgt ccacgagget caaatgccta gccctagtaa gggcggcgggt gactggccgc 60

tgctcagga catgatgcc gataaccacc ggctcatcgt gttcacatcc aagaaaggga 120

agcaggggac ggaggggctc gcgtaccagt gggactacgt cgtggaaacc caatacggga 180

gcgagggcat ggcggatggc agttgcccac agcggaccga gtcgaagccc atggactcta 240

aggcccagtc actagtgtg ctgaacttct tcaccagcaa cccgagccaa agctgggcct 300

gcagcaacat ctccgcgccg ctcacagca tgcttaacgc ctgctaccac gcctccgcca 360

aa 362

<210> 3084

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-F8

<400> 3084

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gcggtcacagc tgcggtgctc ttctacatcc tcgccgttgc tgccctcagc gcggccgagg 120
ccccggcaga gtcaccgaag gaaggcagtg ctgccaaaggc acctgagtct gccaagagaa 180
ctgctgcccc cgctgaagca cccgaagccg catccacccc cgtcgccgcc gctgccccat 240
cgccgtcgtc taggaagtct ggtccageta ccgcgccagc caccgcctct acacccccctt 300
cttcacacga cgaggagtgt agcccttccc cgccagcatc caccgccgcg gcgtccccctg 360
cggctgaggg accggctgct gatgactccg ccggtgctgc tgcc 404

<210> 3085

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-G1

<400> 3085

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caagcgggag tacacgcagt acagcgagta caagaactgg gtgtggaagt cgcaggacga 120
cctgttcctc aacggcgctt tcttcaacca gtccggcggc cagaacgagc gcaagtacga 180
caggctcgac ctcatccagg ccaagggcgg ccagtacgcc gagtcgctca ccaggtagc 240
cggcgcgctc aactgccgcg tcggcaggaa gtgctagtgc gtgtgcagct ctaggctgca 300
gctttcatca ttggcgatcg atcgtaacaa tgcaagggtg tgttgatat aactcttgtg 360
tttgaatgc cgcccgaat taatggtcaa ctctaact gcttgccctt gcctgcgggc 420
aaccaaca 428

<210> 3086

<211> 401

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-064-Q1-E1-G2

<400> 3086

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aaaaatgtcg cgcgtcacag ctgcggtgct ctctacatc ctgcgcgttg ctgccctcaa 120

cgcggccgaa gccccggcag agtcaccgaa ggaaggcagt gctgccaagg cacctgagtc 180
 tgccaagaga actgctgccc ccgctgaagc acccgaagcc gcatccaccc ccgtcgccgc 240
 cgctgccccca tcgccgtcgt ctaggaagtc tgggtccagct accgcgccag ccaccgcctc 300
 tacacccccct ttttccacgg acgaggagtt gagcccttcc ccgccagcat ccaccgcgcg 360
 ggcgtccccct gcgggtgang gaccggctgc tgatgactcc g 401

<210> 3087
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-G3

<400> 3087

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 gggcaagctc cggatcgggg ggcgcgcgcg cggggccgcc gccgccgcca ttatattggg 120
 ttagttaggc cagcttgta ttgcatcgga gagatgtatc cggccactac gccctacgat 180
 acggcgctccg ggggtgggcgt ggcgcgcgtg gccggcttgt tccccgtcgc cggagaggcc 240
 agggagtggg cgctgagggt cctggactgc ttcgacgact tcgacatctg ctgcatgacg 300
 ttttggtgcc cgtgcatcac gttcggggcg acggccgaga tcgtgggaca ccgcatgacg 360
 tcgtgcggga ctagegcagc gctgttcgcg ctgatccagt gg 402

<210> 3088
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-G5

<400> 3088

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 gagatgagga tggatgttct tctgatggaa aatcttttgt ttgagcgga tgtgacaaca 120
 ttgtatgatt taaagggctc tgccagatca agatataacc cagactcaaa tggtagcgat 180
 aaagtacttc ttgatcagaa cttaattgaa gcgatgccta catcacctat atttgctgga 240
 aacaaggcaa agaggctgct ggagagagct gtttggaatg acacgtcctt tcttgcttcc 300

atcgatgtaa tggattactc tttacttggt ggtgttgatg agaaaaggca tgaacttgta 360
atgggtatta tagatttcat aaggcaatat ac 392

<210> 3089
<211> 202
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-G7

<400> 3089

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ccgtacgacg tcacgaagaa cttcaacgcc gctgtccata gatctgtcat catcaatccg 120
cgtgagaggt cggagaggcc ggggaatcac tttggagggg ggccaatgct tggctacgag 180
ccctagcaac atgtgttggc ga 202

<210> 3090
<211> 407
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-064-Q1-E1-H1

<400> 3090

cgggtcggcc acgcgtccga anaaacgana gatgactgtc gtgagcaaca agttgtcatt 60
aatgcaagtt caagttctgg tggccgttgg aacatcatth ctaataagggt gtgcctgntg 120
ttgtcctccc aaggtttccc cangaaagaa catcacaagc aactatggca gtgattggct 180
aaatgccaag gcaacatggt atggcaagcc tacagggtgcc ggccccgacg acaatgggtg 240
cggatgtggg tacaaggacg tgaacaaggc ccttttcaac agcatgggag catgtggcaa 300
cgtccccatc ttcaaggatg gtctggggtg tggatcctgc ttcgagatca agtgcgacaa 360
gccagcggag tgctctggca agcccgtggt ggtatacatt acagaca 407

<210> 3091
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-H3

<400> 3091

ggtcctagat atccggtcga cccacgcgtc cgagcgagat gagcatggac attgtcaggg 60
cgcgagctct ctgaagagga agacgcgcat ccgctcgcgc gatcgccatg catgccccgg 120
aaccgacaga gcagtgctag ctgtttgtct tgcacatcg accggcggcc tctgcatgta 180
cccgtgtgcc gttttttgca ccgccggtgc cagtgttctc ttactccatg taaactactc 240
tagacagtgc tcggtgagta cagctgctcg gtgagtacgg tgtcacagtc actccgtgta 300
ggcagtgccca tttcgaagac aatattgcac aatttaactg gaaaccttaa caaagggcgg 360
ccgctctaga gga 373

<210> 3092

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-H5

<400> 3092

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ctctgcccct tatggggcca ccccgctgcc ttctccgtt caccgtcgac gtctgcggcg 120
gccagcgtgt cccccgaag gccgctgctg aagcgaagga cccacccga ggcgccacct 180
gcggtcgtga ggggtggagat cggggatgag gccgcggcgc tgcgcgaggc attggcgcg 240
cagcaagcgg cgctcgccga cgtccaggcg gagctcgacg cggagcgcg ggccgcggcc 300
ggcgccgcca gcgaggccat gaccatgac ctccgcttgc agcgcgagaa ggctgaggcc 360
atgatggagg caccgcagtt ccgccgctac gccgaag 397

<210> 3093

<211> 389

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-064-Q1-E1-H6

<400> 3093

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cggcgccccg caagccgggg tcgtgcgga cagtgggtgc caacgcggag ctcaaggtgg 120
 tggacccgga caggggcctc tccctcgcc gcaacctccc cggcgagatc tgcacccggg 180
 gcccgcagat catgaaaggg tacctgaacg acccgaggc caccgcgagg acgatcgacg 240
 tccacggctg gctccacacc ggcgacatcg gctacgtcga cgacgacgac gaggtcttca 300
 tcgtcgaccg cgtcaaggag ctcacaaagt tcaagggctt ccangtgccg ccggccgagc 360
 tcgaggctcc ggtctcttcg caaccctgc 389

<210> 3094

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-064-Q1-E1-H7

<400> 3094

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 tcgctaataa catcatggtc gtgggcgccc tccttgccgc gcttgctcgc ggccgggtcgt 120
 gcggggcccc gaaggtgccc cccggcccca acatcaccac caactacaac ggcaagtggc 180
 tcaccgccag ggccacctgg tacggtcagc ccaacgggtc cggcgctcct gacaacggcg 240
 gtgcgtgcgg gatcaagaac gtgaacctgc caccctacag cggcatgacg gcgtgcggca 300
 acgtccccat cttcaaggac ggcaagggct gtgggtcatg ctacgaggtg agatgcaagg 360
 aaaaacctga gtgctcgggc aatccagtca cgggtgttcat cacagacatg aactaacgag 420
 cctatcgtc cctaccactt cgac 444

<210> 3095

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-A10

<400> 3095

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 atcccgccgc cgccgtctct acggtcgcta ataagccgcc gcatccaggg atggagatga 120
 agaagatcgc ctgcgccgtc ctcgtcgccg cctcggccac cgtggcgctg gccgcggagg 180

cgccgggtcc gtctcccacc agcgggtcct ccgcggtcgc acccgccatc gtcgggggccg 240
 ccgtggcctc cttcttcgcg tactacattc actgagccgc cggacgagga accgggagcg 300
 gaggggaaga gaccaaggtg gggggagaga cttggctgcg ctgcgctgct ctgctgctcc 360
 cgcgcatcc cgatgcgtgg gcgtgctctg attgggcacg gcggtggcag tggcacacct 420
 tcgtcttcct tttgtttggt ttttt 445

<210> 3096
 <211> 413
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-A12

<400> 3096

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 ccgtcgccgc cggagcggcc gtttctgctg caaggccggc ctcgctgtct tctagcagga 180
 agcagcagca gcagcccgac gacgccggct gcggcagcag cagcagcgac gaccactacc 240
 agcacgacgt gatcatgctg agggcgacga ggagcggggc ggcattcccg ccgccgatct 300
 ccgtgatcgg caaggcgggg cggccgtggc tctgcctgcg ggcgcaccgc gaggggtggac 360
 gcctcgtgct gcggcagatg cccctgccgt cgcaggagct gctgcagccc tgc 413

<210> 3097
 <211> 223
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-A6

<400> 3097

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 ctgccgctgc tctggcctaa tcaactagtat aaagcaggcg gagacagcct ggccgcctga 120
 ccgcagtgtc ccccttctct ccccgctccc aaccacatgc cctgcctccg ccccgccccg 180
 ccctgcccga gctcgattcc ccagccccca acaacaatt act 223

<210> 3098
 <211> 407
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-065-Q1-E1-B10

 <400> 3098

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 ataacatcat ggtcgtgggc gccgtccttg cggcgctcgt cgccggcggg tcgtgcgggc 120
 ccccgaaagg gccacccggc cccaacatca ccaccaacta caacggcaag tggctcaccg 180
 ctagggccac ctggtacggt cagcccaacg gtgccggcgc tcctgacaac ggcggtgcgt 240
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 ccatcttcaa ggacggcaag ggctgctggc catgctacga cgtgagatgc aacgataaac 360
 ctgagtgtctc cggcaatcca gtcacggtgt acatcactga catgaac 407

<210> 3099
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-065-Q1-E1-B11

 <400> 3099

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 gccaggttcc cagccccggc ctacgccgtc gaccccgccg ggtccacgcc gccgcaggcc 120
 gacttcgtgt ggcggatcat cctgatgctg ggcgcgatgc ccgcggcgct cacctactac 180
 tggcgcacca agatgcccga gacggcgcgg tacacggcgc tggttgcaa gaacgccaag 240
 caggcccgcg ctgacatgtc caagggtgtg cagggtggaga tctcagccgg cgccgccgag 300
 gaggacgccg cggctgcgac tgcgactgag cctgcgccgg cgtccttttg gctcttctcc 360
 ggggagttcc tccgccggca cgggctgcac ctctgggca cgtcctcgac g 411

<210> 3100
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-B12

<400> 3100

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agataaggct ccgccctttt ccgacattca caggggggac aggaaatcag cggccatggc 120
ctcgattccg gcgacgacct tcgccgtcat cttatccgtc ctcttctgtg ccgcggtctg 180
caccgccgtc gacaacgacc tccccgacta cgtcatccag ggccgcgtct attgcgacac 240
ctgccgcgcc gggttcgtga ccaatgtcac cgagtacatc gcggggcgcca aggtgaggct 300
ggagtgcaag cacttcggca ccggcaagct cgagcgctcc attgacgggg tgaccgacgg 360
gaacggcacg tacacgatcg agtcaagga cagccacgac gaggacatct 410

<210> 3101

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-C10

<400> 3101

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gttcacctct ccttcctctc gtccttgctt gccagggaga ggggaagtca gaggcacgga 120
gtggcgcaga gcagacgccc gtgaaccatt gtagctgtcc ctgtcgtcgt cgtcgtcaac 180
gaacccacac aaggaaagga tggagaagaa gccgaccatc ctcatagaaca ggtacgagct 240
cgggcgcacg ctcgggcagg gcaccttcgc caaggtgtac cacggccgga acctcgcgtc 300
cggcgagagc gtggccatca aggtcatcga caaggagaag gtgatgcgcg tcggcatgat 360
cgaccagatc aagcgcgaga tctccgtcat gcgcctcgtc cgccacccca acgtcgtgca 420
gctgcacgag gtgatggcca gcaagagcag gatatac 457

<210> 3102

<211> 283

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-C12

<400> 3102

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 cgtccccgtc cccgccgcag cccgcctcct cggccgccga ggacgccacc gcactgtcga 120
 gcgcggcgac ccacgcgcgg cgcgcgttcg gctcggggac ccgctcctcc tcctcctcct 180
 cggccccgcc gtcgaacccc gggatcggga gcccgcgctt ctccggagaa gcagaagagc 240
 tcccgcgcgc cacgggccga ggaggcgctc ggggcagcgc gcg 283

<210> 3103
 <211> 351
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-065-Q1-E1-D10
 <400> 3103

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 tctgctggtg ttcgccgcgg tgtcgcctgc cgcgcgcgcg gtggcgggcg aggcggaggc 120
 gaaggcgaag gctgtgggag gcgcgccgtc ggtgcccgct ggctcgctgg acatcgcgca 180
 gctgggcgcc aagggcgacg gcaagtcgga cagcaccgcc atggtgctca aggcgtggaa 240
 gcacgcgtgc gaggcgacgg ggcagcagaa gatcgtcatc cccaagggca actacctgac 300
 gggcgcgctg gacctggtgg gcccctgcaa gtctccatc atcatccgcc t 351

<210> 3104
 <211> 393
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-065-Q1-E1-D11
 <400> 3104

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 ctgccgtcaa gcatagacac caagaaccag acctcggggg ggatcatcgg ggtcgcggag 120
 gtctactgga tgggggtcaag aagtatccgg gcaagtcgtc tctgggaacc ctgcttattg 180
 ctgcgccgat gctagcgccg ccgtggactg cgcgggtccg agaagtcgag gtcgtcgcg 240
 catatcccag gaaccttcgg acttggaacg aagctgtcca taatatggaa agcatgattg 300
 ggacgaaggc cgaatcaatt ctgaagctat gcgcaaggaa gcttcgggtc agtagcagaa 360

aaaggaaccg acctaaaaag gaaaaggcta ttt

393

<210> 3105

<211> 282

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-D6

<400> 3105

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tacgcagctg tcgtgtgtcg aattttaaca gcgacggcca tgcacagac gccacacca 120

cacatcattt tctttcttcc tttcttttga ttcgacgacg cctgtgagtc atgcatgctc 180

tcgatcgagg caaagctggt gtatgttggt agcgtgtact gtttttttat tatttataaa 240

gttttgatgg gaaggaaaaa gaagggcggc cgctctagag ga 282

<210> 3106

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-E12

<400> 3106

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ctgatgtgcg agatcgaggg ccaccacctc gcggcggcgg ccatcgtcgg ccacgacggt 180

gccgcctggg cgcagagcac ggcgttcccc gagttcaaga ccgaggaaat ggccaacatc 240

cataaggact tccacgaacc aagggaactc gcgccgacag gcctgttcct cggacctacc 300

aagtacatgg tcatccaagg cgaacctggt gccgtcatcc gtggcaagaa gggatcagga 360

ggc 363

<210> 3107

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-065-Q1-E1-E9

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 ccgcccctttt ccgacattca cagggggggac aggaaatcag cggccatggc ctcgattccg 120
 gcgacgacct tcgccgtcat cttatccgtc ctcttctgtg ccgcggtctg caccgccgtc 180
 gacaacgacc tccccgacta cgatcatccag ggccggtctt attgcgacac ctgccgcgcc 240
 ggggttcgtga ccaatgtcac cgagtacatc gcggggcgcca aggtgaggct ggagtgcgaag 300
 cacttcggca ccggcaagct cgagcgctcc atcgacgggg tgaccgacgg gaacggcacg 360
 tacacgatcg agctcaagga cagccacgag gaggacatct gcgaggtggt cttggtggag 420
 agcccgcgca aggactgcga cca 443

<210> 3110
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-065-Q1-E1-F12
 <400> 3110

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 gcgcccgggg acagcccaaa caggatggc atccatgg gcgactcatc cgggatcacg 120
 atcaccaaca ccgtcattgg cgtcggtgac gactgcatct ccatcgggcc cgggacctcc 180
 aaggtgaaca tcaccggcgt gacctgcggc cctggccacg gcatcagcat cggcagccta 240
 gggcggtaca aggacgagaa ggacgtcacg gacatcaacg tcaaggattg cactcttaag 300
 aagacgatgt tcggcggtccg catcaaggcg tacgaggacg ccgcctccgt gctcaccgtc 360
 tccaagatcc actacgagaa tatcaagatg gaggactcag ccaaccccat cttcatcgac 420
 a 421

<210> 3111
 <211> 451
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-F9
 <400> 3111

cggttcgagc cagcggtccg attaattgcg ccaactgctc ttatcctcct cttgcattgc 60

attgcagggtc gtagttgagc agcagcaacc actgcacagg atgtcgtggc agacgtacgt 120
 cgatgagcac ctcatgtgcg agatcgaggg ccaccacctg agctctgccg ccatagtcgg 180
 ccacgacggc gccgtttggg cccagagcac cgcattccca cagttcaagc cagaggagat 240
 gaccaacatc attaaggact tgcagagcc tgggtttctg gccccgatcg gcctcttcct 300
 tggccccacc aagtacatgg tcatccaagg cgagcccggc gctgtcatcc gcgggaagaa 360
 gggatctgga ngcataactg tgaagaagac cggacaggcg ctggtgatcg gcatctacga 420
 cgagcccatg acccctggac agtgcaacat g 451

<210> 3112
 <211> 394
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-065-Q1-E1-G11
 <400> 3112

gggtccagcc acgcgtccga ccacgcgtcc gcgctcatgt ccgctcaccg gggcgggctc 60
 agcatccttt cgaagaagta acacttctcc gtgaggcctg agccccctcg cgcggtgagc 120
 caagccggcg cagctcgccc cgggggtcac gtcaccacc gagccccaac caattaataa 180
 tatatatata tagctaggat cgatcgtcag taaaatggca ggctccgccc tcctgaggag 240
 cccctgtcc gtctctctct acatctctcg cgccgtgccc gccaccgccc cggcgacgcc 300
 gaccgacgcc gccatcgacg aggcgtagcg gcatctcgtc aacctcaccg ctaaccagga 360
 gtactgggcg gagcgcgcg aggcgggcgca cgcg 394

<210> 3113
 <211> 298
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-065-Q1-E1-G12
 <400> 3113

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 ggcgggggcc cgctctgctg atcgcgatgg agcgggcgag cagcagcggc gcggggagct 120

<210> 3116
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-066-Q1-E1-A1

 <400> 3116

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 caagatgagg gagatcatca gcatccacat eggccaggcc gggatccagg tcggcaacgc 180
 ctgctgggag ctctactgcc tcgagcacgg catcgagcac gatggcacca tgcccagtga 240
 ttcctcgggt ggcgctgcac atgatgcctt caacacgttc ttcagcgaga ctggttccgg 300
 caagcatgtg cccagggcca tcttcgtcga cttgagccc actgtcatcg acgagggttcg 360
 cactggctcg taccgccagc tcttcacccc agagcagctc atctcgggga 410

<210> 3117
 <211> 339
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-066-Q1-E1-A5

 <400> 3117

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 agccgtaacc agcgtcggga gcgtcggacg atggtagctc tacaacattc atcaccgaca 120
 gacggtctat gtggagctgg gtctcacggg caggatttct gtcgtcccgc aaactcgtac 180
 tttcatcata atcacccttg ttgtcgaatc ttcagacatc agttacactg tcactgtcaa 240
 gattcaagaa taagagggaa tccctccata aactagcgg ctcaacttttg ccggtaatca 300
 tctctacgac ggaccacac tgagctacta gaacattca 339

<210> 3118
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-066-Q1-E1-A7

<400> 3118

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tccttggcgg ccgagcgggg ctcctctga cgactccgcg ctctctctgg tgcacggccg 120

cttctattgc cgtcgctgg ggcttctgct gcgttaccat gggccaaaca acgaggaaaa 180

tgccgagaga gagaggtaga gacagtttgg tcgtcgagtc acatggaggg tgccctggtg 240

gccggggaat ccttcacctg cggggtgcta catcgccggg ctgctgcac gtggtctgcc 300

tctactacca gggctgactc cattgccgga cagccaaaac tctcggtcga gtctctgaag 360

gccgtctgtc cctgttcctt ccgatttcca agcgccgccg ggctgtgctg ctaccgt 417

<210> 3119

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-B12

<400> 3119

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ggcaggatcc agtgcaaggg caagtgcacc gagcagaagg gcatcacggc gccggccatg 120

aaggctctgcc aggaggagtg cgacaaggcg tacgtggtga aggcggccga ggtcaccaag 180

gcctgcagcg tcacctgcgc caaggagaag aaccgcgcc tcagcgagaa ctgcaagagg 240

tcctgcaccc ctctctcttc ttgaagcgaa gcccttgaa atgaatgaac catgcatgca 300

tgcatgcatg tatgcatgcc cccggggtga cgtggcgttc agctcaggcg ctgagcgagt 360

ctatacgtag gtcgtcaacg gctgggcacg catgccataa ccatctgata tggacggaac 420

tata 424

<210> 3120

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-E1

<400> 3120

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acggtggaga tggccggtgg cgcgaggcta gagccggaag ccaagagcgt ggtgatgccg 120
gaggtagtgc ccgggggtggc gtgcctggcc tttaggaagc tgccgcgggg agggcccggg 180
atcttgggca acgtgctcat gcaggagtac atctgggaga tcgaccacgg aaaggggaag 240
atgaggttca ggaaggacaa gtgcaacacc catcatctcc acaacagcaa aggcggagag 300
gtctataata ataataatgg caattcctcc tctactgtcg tgcacgcgt caattaattc 360
gttctctcct ctctacctct acaaaattaa aggaccagac catgcatgca c 411

<210> 3121

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-E5

<400> 3121

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ttctccctcc tccacctttc tctttttctt gccacggcaa aacaccttcg ccggcgagag 120
catggcgatg gcgtaccgtg tcttggaggt caccctggtg tcggcaaatg acctcaagaa 180
agtgtcgtc ttctcccga ctcgcatcta cgccgtggct tccatctccg gattcgacct 240
ccgcatccct tcccacagca cccaagcaga ccacagcaac ggctgcaacc cctgctggaa 300
cgccgtggta cacttcccca tcccggctgc cgctgacacg cgcggcctcg cactcca 357

<210> 3122

<211> 319

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-066-Q1-E1-G4

<400> 3122

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cgcaaggcca cctcatggca cgttctcccc gctgactgga agttcggcgt cacgtaccag 120
gcatccaaga acttctaagt agccactttc cctcctcttc ttcacctcgc atatgcccac 180
aagcaaccat gcaaatgata acatgcatca tgcacgata ttcattcttt cgctcatgca 240

ctccaatatg gtgccggagt taaaaaatg taaatcaatg tgcaaaactca aatgacatct 300
taaccagttg tgatcanaa 319

<210> 3123
<211> 303
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-G8

<400> 3123

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atcatacctc aggaacctgt tctccttgaa gggaccatta ggagcaacat tgatccgctt 120
gagcagtatt ccgatgatga aatctggcag gcattgggcc gctgtcagtt gaaagaagcc 180
gtagcttcaa aaccggaaaa gcttgatgct tcagtcgtcg acaatgggtga aaactggagt 240
gttggaacaac gtcaactgct atgcctgggg cggtgatgc taaagcacia caaaatactg 300
ttc 303

<210> 3124
<211> 286
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-H11

<400> 3124

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agccagagaa actaataaaa ctctcgccgc cgccatccga gcgaacaagc caaccgaccc 120
cgtccccaag gcaatccgcc gccgacgtac caccaccacc gcaggagcga gatggagatg 180
aagaggatcc tcttcgccgt cctcgtcgtc atcgccgcct cggccaccgc agtgctggcc 240
tccaccgagg ccgcccgcgc gggcgcccca actgcctccg agtcgt 286

<210> 3125
<211> 284
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q1-E1-H2

<211> 366
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-A10

<400> 3128

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 tagttatgga cggattggta ggctcttga aagttcgcgt ggtccgggggt atcaaccttg 120
 cctaccgcga cgcaagaggc agcgatccgt atgtcgtcct acggcttggc aagaagaaac 180
 tgaagacaag cgtgaagaag agatccgtga accccatatg gcaagaggag ctaactctga 240
 ccgtcacaga tcccagccaa ccaactgaagc tggaggtgtt cgacaaggac accttcagca 300
 gagacgaccc catgggagac gcggaggtgg acgtggcgcc actgatggag gcggtgagca 360
 tgaacc 366

<210> 3129
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-A4

<400> 3129

gggtccaccc acgcgtccgt acgatgtcac tgctgtgag accaaggtca ttcctggcaa 60
 ccttgggttt gttgcacaac tcaatgaagg gcgccatctt aagaagcgcc ctactgagtt 120
 tcgtgtggac cgtgtgctcc agccgtttga ccctgccaaa ttcaatttca caaaagttag 180
 ccaggaagag gttctcttcc aatttgagaa tagtggtggt gatgacagct atttcctgaa 240
 caacgctcca atcattgctg ttgatcgggc tccaaatgtt attgctatca atgtaagccc 300
 aattgaatat ggacatgtgc ttctcattcc tcgtgttctg gaccgcctgc ctacagaggat 360
 tgattcagag agcttcttgc ttgcactgca aatggcagcc gagggaggta gcccatatc 418

<210> 3130
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-A5

<400> 3130
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 acgcctggcc tgggctggcc gcctccgacc accgtacgtc ctccaccgcg tcgccgccgg 120
 ccggcctctg cccagcccgg gctgcctgcg agggcttctg atggccctcg acgccgtcct 180
 ttctctctag tgcccagctt tattgcagat ccagccctct gatcctcgtc ttctttcacc 240
 tctccaacat gaaggccaac accaagatca agctggagcc ggtcatggcg ccgtcgtcgt 300
 ccctgccgcg gagcgccagc gagctacccg acccgccgtc accgttcagc tccaacacgg 360
 cgcaccaccc cgtctccgtg cccaccacac ctaggttgtc cttatcgtgc tcgtcgttcg 420
 gccacatggt gaccccgccc accgac 446

<210> 3131
 <211> 456
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-066-Q2-E1-A7

<400> 3131
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 tgctctcttt ccttggcggc cgagcggggc tccctctgac gactccgcgc ttctcttggt 120
 gcacggccgc ttctattgcc gtcgcctggg gcttctgctg cgttaccatg ggccaaacaa 180
 cgaggaaaat gccgagagag agaggtagag acagtttggt cgtcgagtca catggagggt 240
 gccctggtgg ccggggaatc cttcacctgc ggggtgctac atcgccgggc tgctgcatcg 300
 tggctctgct ctactaccag ggctgactcc attgccggac agccaaaact ctcggtcgag 360
 tctctgaagg ccgtctgtcc ctgttccttc cgattccaag gcgccgccgg gctgtgctgc 420
 taccgtctgt tggtgaggtt ggtgatgac cggtca 456

<210> 3132
 <211> 473
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-066-Q2-E1-A8

<400> 3132

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 gtggatcatg gacggattgg taggcctctt gaaagtccgg gtggtgaggg gcatcaacct 180
 tgcctaccgc gacgcaagag gcagcgatcc gtatgtcgtc ctacgacttg gcaagaagaa 240
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 gaccgtcaca gatcccagcc tagctctgaa gctggagggtg ttcgacaagg acacgttcag 360
 cagggacgac ccgatggggg acgaggagat cgacgtggcg ccgctggtgg aggcggcgaa 420
 cgcgagcccc gaggcgagcc tgaggaacgg cgccatcatc ctgtcgggtgc ggc 473

<210> 3133
 <211> 381
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-066-Q2-E1-A9
 <400> 3133

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 agatcgagaa cgtcgagAAC ctgtccatca acggccacgg caccatcgac gggcagggag 120
 ccctggtgtg gagcaagaac cagtgccagc attcttaca ttgcaagatc ctcccgaata 180
 gcttggtgct ggattttgtg acgaacgtcc agatccgcgg catcacgctg ctcaacagca 240
 agttcttcca cctcaacatc ttcgagtga agaacgtgct gatcgacaaa gtgacgggtca 300
 agggccccgg cgacagcccc aacacggacg gcatccacat cggcgactcc agcaacgtga 360
 ccatcagcag caccaccatc g 381

<210> 3134
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-066-Q2-E1-B10
 <400> 3134

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 cggttatggc aggatgtggc tgacctccca tttccctctt ctctctctcc ctacctggtg 120

ggatgtggcc ttgtcccaa tctctgcatg ggaagtcag cggaggagt gtgatggtgt 180
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aagaaagaga ttacctaaca tttggatctc actgccacat ctggtgtcac atccatattg 300
tcccgcaagc gtgcatgagg gcggcagcgg tggcacgaga gggaaagaag aaactaccta 360
acattttttg cctcactggc acggcatcaa aagcatttag gaatagtcaa ggggggt 416

<210> 3135
<211> 249
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-B11

<400> 3135

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taggtgcaag agatttgctt gtcaaccatc acaattcgcc tcgcggtcat ataggatgac 120
agggcatagt atcgcacaca ctgtgagcag acttgctgac agaactgtaa cattcggttc 180
attgaatgaa gtttgctgac aagatgggta ccaagagcat cgatgttgct catcggtttt 240
tggacgccg 249

<210> 3136
<211> 76
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-B2

<400> 3136

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cggccgctct agagga 76

<210> 3137
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-B4

<400> 3137

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 atgggatccc tcgctaataa catcatggtc gtgggcgcgcg tccttgccgc gcttgtcgtc 120
 ggcggtcgt gcgggcccc gaaggtgccg cccggcccc acatcaccac caactacaac 180
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 gcgtgcggca acgtccccat cttcaaggac ggcaagggtc gtggctcatg ctacgaggtg 360
 agatgcaagg aaaaacctga gtgctcgggc aatccagtca cgggtgtcat cacagacatg 420
 aactacgagc ctatcgctcc ctaccacttc gac 453

<210> 3138

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-B5

<400> 3138

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 tctgactgaa tgcggctaata ccttcagcag tacatgcttg agcagtaaaa tgtcacggac 240
 atgaaggaca acctcgccat agattgcact ggagctagac tagaaaattg agactgccaa 300
 gactagctct tcttggttat aagagctacg aactgcatg actcgacagg tcatcactat 360
 ttgtgctgaa cg 372

<210> 3139

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-C12

<400> 3139

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 ccaaataagg tcccgccctt ttccgacatt cacagggggg acaggaaatc agcggccatg 120

<210>	3144
<211>	441
<212>	DNA
<213>	Zea mays

<223> Clone ID: LIB148-051-Q1-E1-B11

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gcacagacaa	tgcgatgaga	gccttggtcc	tcttggtcct	cttctgcac	gtgcatggtg	120
agaaggaaga	gtcaaagggc	atcgatgcga	aagcgtccgg	gcctgggtggg	tccttcgaca	180
tcaccaagtt	gggcgcctcc	ggcaatggca	agacagacag	cacgaaggct	gtgcaggagg	240
catgggcatc	ggcgtgcggc	ggcactggga	agcagacaat	cctcataccc	aagggcgact	300
tccttgtcgg	acaactcaac	ttcacaggcc	cttgcaaggg	cgacgtgacc	atccaggtgg	360
atggcaatct	gctggcgacc	acggacctaa	gccagtacaa	ggaacatggt	aattggatcg	420
agattctacg	cgtggataac	c				441

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-B12

<400> 3145

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aggtagagaa	tcggtttttc	ttgtctcagc	ccgggggtctg	ctgcgtctgg	tggtggtgaa	180
ggggagaaaat	tcgtgagatc	tgttccggat	caggcgtgcg	agctcgggaa	tcaggggttt	240
cacacatagc	ttcgtcgatt	tgaatttgat	gtactaatgg	agtctaaggg	tggcaaaaag	300
tctagcagta	gtcgttctat	gatgtatgaa	gtcccccttg	gctacagcat	tgaggacgtt	360
cgacctgccg	gaggcgtgaa	gaagttcagt	ctgctgctta	ctccaactgc	g	411

<210> 3146

<211> 464

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-B2

 <400> 3146

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 ctctccccgc aggcgctggg taagggtagg ggaggcaggg gacacggtgg cgccgtcaac 180
 ccgcaggctc cggcatctg ctctcgcacc ccgttccccg aggtgtgcac gtccaccgcc 240
 gggcggcacg cgtccaagta cccggtcacg gacaacctgg ccgtgctgaa catgcagggtg 300
 gacgcgttcg ccaagcgac cgcgaggcg cgcaagcac tcgcgaggtc ggcccgacc 360
 atcccgccgc agcagacgca ggcgctcacg ttctgcgaca ccatgtacat gaacacgcaa 420
 gacaccatcg gggccgcgca gccgggcac acgttcaagg acac 464

<210> 3147
 <211> 348
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-B4

 <400> 3147

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 ctgcttcgtc ggcggcctcg cctggggcac ggacgaccac tccctccaca acgccttcag 180
 cacctacggc gaggtcctcg agtccaagat catcctcgat cgggagacgc agagggtccc 240
 cggttcggc ttcgtcacct tctccacgga ggaggcgatg cggaacgcca tcgagggcat 300
 gaacggcaag gagctggacg gccgcaacat caccgtcaac gagggcca 348

<210> 3148
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-B5

 <400> 3148

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cctctccaag cgtcaaggcg gtcctccggc tcgccgggg ctccgaggag gaggaggacg 120
gcggcggcaa aaagaagccc cacgtcaacc acggcaagtt taaggcggag ccgtggacgg 180
acgggcacgc gacgtactac ggccggcgcg acgggttaac tgacaccacg gacagcggcg 240
cgtgccccta caagggcgag ctggggaaag actacggcac cctgacggcg gccgtggggc 300
cgtcgtgta caccaacggc accgggtgcg gcgcgtgcta cgagctcaag ggccccaagg 360
gcaccgtggt ggtgacggcc accaacgagg ccccgccggc cggttaaccg gcagaaaggg 420
c 421

<210> 3149
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-B6

<400> 3149
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tcgtgcagcc tgcacgggtc gacgagggct gcacgaacga tgggggtccgc ctccgcctca 120
gtgacgacaa ccagcctgct ggccgtggcg ctggcagcgc tggctttcgt ctccagggcc 180
gcggcgcagg gcaacggctg ttccagcgtg atgatgacct tggccccgtg catggacttc 240
atctccagca aggcgtcgga gccggggatc tctgctgct cgggtgctggc cggagtcgtg 300
cagaccgacc cccgtgcct ctgcatggta ctggacggca ctgccacgtc cttcggcatc 360
gccatcaacc agaccagggc gctggagctc ccggcgtctg c 401

<210> 3150
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-B7

<400> 3150
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gacagcgacc aggaagaggg tgctgagggg ggcgatgacg gtgacagcag ttgcccacac 180
gccatcgaca tgcaggcgga ggagttcatc accaagttct atgagcagtt caagtcagaa 240
tcgttcaacg gccgtgcctc cgagtgatcc attgatccat ccgcttgccg catgtatgta 300
atcgttctga tcttaaccga aattgcattc gtgtcagaga cgactctacc caatatggat 360
caggaagaaa tgtatcagtg atcgcatcga taaacacagt ttgtctgaac tct 413

<210> 3151
<211> 423
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-051-Q1-E1-B8

<400> 3151

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aagaaagggg ccagcaactt gtctactgat ctgaacggca agaccatgcc caagaaggat 120
tcagcgtctg cagagaaaca gcctccgaac cgtgcgaggc cgaaaggaat gagtggcagc 180
agcaattttg cagacgggaa ggctcaacc tcaacaaccg gagatcatga aggccgtcgt 240
accgggcagc ctccctggcg cgacagcagc attttgctgg gctagcgtgc atatgaatct 300
tgccctatgc cgccgccgca cgggtggttg gtccgtcagt ctgtggtctt gttttcgtgg 360
tcaggccatg tgcncatct ccggtccttc agatgatctg gttcgcactt gtcttgtgta 420
tgg 423

<210> 3152
<211> 299
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-B9

<400> 3152

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atgtcacagg aaggacagct ggcttccgaa ctcaatacac acagggtgtc tatgatccca 120
ggctccggac gtgccatag cacaacgaga aggacaagag ccaacaagga ccatactcat 180

gtagctaccc tgtggcgctg ctggaagcag cggccgcacg ttcgagatca cgaatctctg 240
 cgcgaccatc caacgtaata ccgcctccac aaaggcactc caatacactt caacgtcag 299

<210> 3153
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-C1

<400> 3153

gggacgaccc acgcgtccga gccgagttcc gcaccttcat cgagatcgtc ttcgagaacc 60
 ccgagaagag catagactcc ctccacgtcg atggctacgc cttcttcggc gtcgggatgg 120
 gccccgggaa gtggtcgccg gaggtgagga agacgtacaa cctgctggac acggtgagcc 180
 ggcacacgat ccaggtgtac ccgcggtcat ggacggcaat catgctgacg ttcgacaacg 240
 cgggcatgtg gagcgtgcat tccaacatct gggagcggta ctacctcggg gagcagttct 300
 acatcagcgt cgtctcgccg gcgcgatcac tgcgcgacga gtacaacatg cccgacaacg 360
 ccctccgctg cggcaatgtc gtggggctgc cgctgccgcc gtcctacgcc ccgcgcgcta 420
 agac 424

<210> 3154
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-C10

<400> 3154

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 catccaccac gtccgcctcc agggcctgga gcctgggacc aggtacttgt accggtgcgg 120
 cgacccggcc atcccgacg ccatgagcgg cgtgcacgcg ttccgcacga tgccggccgt 180
 cgggccgggg agctaccgga ggcggatcgc cgtggtcggg gacctcgggc tcacctacaa 240
 caccacctcg acggtggacc acttggtgcg caaccgcccc gacctggtgc tctcctcgg 300
 cgacgtctgc tacgccaacc tgtacctgac caacggcacc ggggcggact gctactcctg 360
 cgccttcgcc aagtcacgc ccatccacga gacgtaccag ccgcgctggg a 411

<210> 3155
 <211> 466
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-051-Q1-E1-C12

<400> 3155

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ccctcccact ctgcgcgcgg tcccgcgatg ggctgtttct catcggccgc taagagatgt 120
agaaagtgca agaagttcct ccgcagcgcg ggcgcggtgt gctgctcgcc gtcggcctcc 180
tccgcccctg ctggtggtgt gcgcggcaac gaagaggcgt cgacgtcggc gctggcttcc 240
gcgccagatg gcaagaaaaa gaagaggtgg aggaagagaa agttctggag aaagaagaag 300
aaggccaaga aggagagcga cgatggcagc ggcgagctcg tggatctcgt caacagcttc 360
tcggccaagt ccgacgtgtg caagaacgtg aatgcggccg aggagatcct acggggctgc 420
aaccagaaca tggccagcag ggcgctgacg ttcagcnagc tgggcg 466
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<210> 3156
 <211> 391
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-C2

<400> 3156

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gtgtccgcc cctgcgcgtt acagcggcgc ctgcgcctcc ggttccacag cgtctgcctg 120
cctgcgcggc cctgtgaccg tgaggcgaca cgacgccgag agatcacccg cccccgcat 180
cgtgtccgcc ccgcttggga ttgtgaggtg aagcgtgatg gcagcgcgc cggcgagggc 240
tcgagccgac tacgactacc taatcaaact gtcctcatc ggagacagcg gcgttggaag 300
aagttgcctc ctgttacggt tttcagatgg atcattcacc actagcttca ttaccactat 360
tggcattgac ttcaagataa gaactgttga g 391
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<210> 3157
 <211> 406

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-C3

 <400> 3157

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 caattaagcc tccccgaccg ccacatctat taggtgcagc catgggtgcc tgtgcaacga 120
 agcctaagac gcttgagggg aaagccccag ctgaggccac catctccaca cccaagggtg 180
 cacctgagac cactaccatc cacattgagg ttgcggcaaa acatgcagta gttgagaagg 240
 tggaggagga caaggaggag gcactaacag tggcggcgaa acaagagcca gcagccacca 300
 ttgagcctca gcagattgct agtgagggtga ccacttcgga agtggcggtc gtcgttgctg 360
 agcctgagaa caaagaggag gaggaagttg tggagaagaa cgtcat 406

<210> 3158
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-C5

 <400> 3158

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 gccaacgaa aatgtcgcgc gccacagctg cggctctctt ctacatcctc gccgtcgtg 120
 ccctcagcgc ggccgaggca cgggcagagt caccgaaggc aggcagtcct gccaaaggcac 180
 cggccgagtc accgaaggca ggcagtcctg cagctcctgc caaggcaccg gagtctgctg 240
 ccacgagaac tgcccccgct aaggcacctc aagccgcctc ccccccgcc gttgccgctg 300
 ccccatcgtc gtcgtcgtct aggaagtctg gtccagctgc cgcgccgacc accgccgcct 360
 ctacaccgtc ttcttccacg gacgaaga 388

<210> 3159
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-C7

 <400> 3159

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 tcacctccc tccctcacac aaataataag gaaagggtccc gcccttttcc tccgacatcc 120
 acaagggggg aggggaaaac acgtacattc acccggcggc aataatggcc tcggttccgg 180
 ctccggcgac gacgaccgcc gccgtcatcc tatgcctatg cgtcgtcctc tctgtgccg 240
 eggctgacga cccgaacctc cccgactacg tcatccaggg ccgcgtgtac tgcgacacct 300
 gccgcgccgg gttcgtgacc aacgtcaccg agtacatcgc gggcgccaag gtgaggctgg 360
 agtgcaagca cttcggcacc ggcaagctcg agcgcg 396

<210> 3160

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-C8

<400> 3160

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 agcctgcccc gcctgcgcga cttcctgcgc ggctcgtca acccgtccaa ctacgtggag 120
 gtgcgcaaga accggtcggc gctgtggatc cggcacagcg acgccgtgtc gtgcctgagc 180
 ccgacggacc cggcgcaggg gctgctctac tccgggtcgt gggaccgcac cttcaagggtg 240
 tggcgcatca gcgactccaa gtgcctcgag tcgggtggtg cgcacgacga caacgtcaac 300
 tccgtcgtgg cggcgttcga cgggctggtg t 331

<210> 3161

<211> 330

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-C9

<400> 3161

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 ggtggatcaa caaaagaatg aatgccaatc cgatgctgtt cggatgaatc tgatacagac 120
 aggggtccgtg tacgtaggcc gaatccggac ccaaccaaac agtactagac tggataaacac 180
 tgcacctaac ttaaattgggt ctttcttctc aaacgccaaa ttaaattggc caaaaaaact 240

gaaaaaaaggc cggacgctct agatgattca agcttacata cacatacaag ctacgtcata 300
cctcatcaaa tgtatcacct aaattcaatt 330

<210> 3162
<211> 318
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-D1

<400> 3162

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gcttccagat gcagaaagac attgaacctg acaatattca aatgcccatg catcagacgg 180
acatgtacat ccataatagg attttgacag aaattgcggc ggggtgcgcct gttgtaagct 240
tttgttccgg acattccggg attaaaagca aaggtaacct gtttccggaa aagcgaaaca 300
aaataaagga tccagaca 318

<210> 3163
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-D11

<400> 3163

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tgctggccgc caaagagccg gcgcgggcgc ccgccaaggg ctacgcgtac gcgctcacct 120
gcgcgctcct ggcttccctc acctccatca tctacggcta caaccgcggg gtgatgagcg 180
gggcgcagaa gttcgtgcag gccgacctcg gcgtcacgga cgcgcagctg gaggtgctca 240
tcggcgccac cagcgtctac tccctcgctg gctcgctggc ggcgggctgg gcgtgcgacc 300
gcgcggggccg gcgcgcgacc atcgcgctgt cggcggcctt gttcctcgcc ggctcagccg 360
tcaccgcccgc cgccgacggc tacgccgcgc tcatggcggg ccagttcgtc gccggcgctgg 420
cctgcggatt cggcctc 437

<210> 3164
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-D12

 <400> 3164

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 attgagaagc agggagaaaa aatggcactg gccattgag gaagcttgag aaccagttaa 180
 caagaattgc caacatatte ttggacaate ttgttaacag agttttaagg tttcccagca 240
 gagaagagcg cgtgcaacca ccacattcat ataattaata agcaaggttt agagaagagg 300
 caacatgggc acaaagatga agaaggggat cctgaagccg ttccgctata tctcaaccat 360
 catggatggt aaggaggctg aaatgcaa at tgggttcccg acggatgtaa aacacgtggc 420
 acacatcggt tggga 435

<210> 3165
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-D2

 <400> 3165

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 gcttccgccc gcgggcggcg cgagccggga gatggacggc ggcgcggtg ccggtcggag 120
 gagcgtcccc tctcctccg gattcaggag gagggctccc cccgccgaga acgggcacgg 180
 ccatgacgcc ccgccgccct ccaggcggtc ctccgcctcc ctctcccgcg gccactccac 240
 gccgctgact ggcgagagga ccgtgaaaag gctgaggttg tccaaggcac tgacgatacc 300
 ggatcacacg accgtgcacg aggcttgctg gaggatggca tcacgcagg tagatgccgt 360
 gttactgacc gactccaatg ctttgctctg tgggatcctt accgacaagg acataaccca 420
 caagagtgat tgctcgtga 439

<210> 3166
 <211> 122

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-051-Q1-E1-D3
 <400> 3166
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 ccgaactaag cacaaagaat tgactgaaag aaagggctga cgtccctaga ggatttaact 120
 ta 122

<210> 3167
 <211> 400
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-051-Q1-E1-D5
 <400> 3167
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 gtgctggagg agctcatgtg gaccatgttc tgcaacggca agaggggtggg ctacgcgggtg 120
 cggcggggacc ccaccgagga ggacatcgcc gtgctggaga cgctgtgggc cgtctccatg 180
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 ggaccgcccg gcggcgactg cccggagctc gccatcttct tcgttaggct atgaattgaa 360
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<210> 3168
 <211> 309
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-051-Q1-E1-D6
 <400> 3168
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 gttttgcatt tctttgtggc aacatagatg agcttgagca ctctgttcac gagaatttac 180
 ctagagtctc tgtagtcatg cctttgaacg gctttggcga acataagttg caaaattgga 240

gaagtcagat tacatcaatt tatggtgggc cactggaatt catgtttatc gtcaaaagca 300
gagatgatc 309

<210> 3169
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-D7

<400> 3169

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acaaggcgaa ggaggcgacg accgtcgtcc cagcacgctc ggcgaggag gagaagacca 120
ccaccgacga acaggccgct gccaaactaac tgattacaag gaggccaaaga cctagacgac 180
ttgcatccac cacaatccat tttgtccaac tgaattcggc cgccggcccg gcggtccctt 240
ttggtgtacc ccacaccatg gttcctttcc ctgatattgg cccggtctgg actcactcaa 300
taaaatgtgt tctatctata gaccctttcg aaaaaaaaaa aaaaaaaggg ggg 353

<210> 3170
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-D8

<400> 3170

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agcggcgacg gcggggcgcc ggcggaacgcg atgtccgttg tggcggccgt gggggccgcg 120
gcggcgccgt cttacgggca gccgctgtgc ggcgggcgccg cgaggaagag gaaggacgcg 180
ggcgtgggtcc aggaccagga ccaggaccag gatgcagggt cgtcgttgcg ggggtggttaag 240
aacgccgcgc tgttcgtgct ggaaacggtg gaggaagagg cggacgcgga cactgagagg 300
tcgtccatcg gcgcggcgctc cgaggacggc gacgacgagg acgaggagga ggtggctagc 360
cgcgggacga atggcgcccg ggccccgctc gcctgcatgg acatggggcc cctcc 415

<210> 3171
<211> 445

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-D9

 <400> 3171

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 gtggtcgtta gtgcagggtgc aggtgctggt ggcgggtggca ttagcatttc tggtaggcgg 120
 tgcctggtgt ggtcctccca aggttcccc gggtaagaac atcacagcca aatatggtag 180
 tgattggcta gatgccaagg cgacatggta tggcaagccg acagggtgctg gccccgacga 240
 caatggtggc ggctgcgggt acaaggacgt gaataaggcc cttttcaata gcatgggcg 300
 gtgtggcaac gtccccatct tcaaggacgg tctaggttgt ggatcctgct tcgagatcaa 360
 gtgtgacaag ccagcggagt gctctggcaa gcccggtgtg gtgtacatta cggacatgaa 420
 ctacgagccc atttgcgga tacac 445

<210> 3172
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-E1

 <400> 3172

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 cccacgcgtc cgcacacgcg tccggctacc ctgctcgctg tctcactcac cccgccttca 120
 cgcctccctc accaaataag gtcccgccct tttccgacat tcacaggggg gacaggaaat 180
 cagcggccat ggctcgatt cgggcgacga ctttcgccgt catcttatcc gtcctcttct 240
 gtgccgcggc tggcaccgcc gtcgacaacg acctccccga ctacgtcatc cagggccgcg 300
 tctattgcga cacctgccg gccgggttcg tgaccaatgt caccgagtac atcgcgggcg 360
 ccaagggtgag gctggagtgc aagcactttc gcaacggcaa gctcgagcgc tccat 415

<210> 3173
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-051-Q1-E1-E10

<400> 3173

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tcgtggggcgc gcagatcacg ctgcagaacg tgcgcaacgt gatcctccac aacctgcacg 120
tccacgacgc cgcgggcgcac ggcgggggcg cgatccggga ctgcgagcac cactggggcg 180
tgcgcgggga gagcgacggc gacggcgtct ccgtgatggg gtccagcgat atctggatcg 240
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ccatcacctg ctccaacggc cacttcacga ggcacgacca cgttatgctg ttcggggcca 360
gcgacgccgc gtccaaggac agggagatgc anggtcacgt cgccttcaan cacttcggca 420
aagggtggt gcagcggatg 440

<210> 3174

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-E11

<400> 3174

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ggcgaacgcg ggcctcgccg agctccgcgg cgaccacatg ccctactcca agttctggca 180
cgccgtggcg ggtgccgccg gcggggacac caggcagcgg gcggggatgc cgctcctgcg 240
aagccgggac ggcattgtgc tggcctacgc cccggcgctg ctgcgcccg ccgcgtcctt 300
cgcggtgccg ggcgccgtcg agggcgcgcg cgccgagctg ctgagcgccg cgctcgccgc 360
gcacttcctc aagcgggtcc tcgaggtgct gtgcgtgcac cggtagcgcg ggagcatgcc 420
gctgggc 427

<210> 3175

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-E12

<400> 3175

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gtgatcgtgg ggatcagtc tctctgtgg gcttctgctc tcattctcct ctccctcaac 120

gtcaatggat ggcacacccat gctctggatc tccatcatgc cggtggtgat catcctgtcg 180

gtgggggacga agctgcaggg catcatctgc cgcattggca tcgacatcac ggagcgccac 240

gccgtcatcc agggcatccc gatggtgcaa gtcagcgact cctacttctg gttcgcacgc 300

cccaccttcg tgccttctct catccattc accctcttcc agaattggctt ccagatcatc 360

tacttctctt ggattctgta tgagtacggc atggactcgt gcttcaacga ctcggaagag 420

ttcgtccttg cagactctg 440

<210> 3176

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-E2

<400> 3176

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ccaaatccac ccgtcggcac ctccgcttca agatgcagat ctttgtgaaa accctgactg 120

gcaagactat caccctcgag gtggagtcgt ctgacacccat tgacaacgtt aaggccaaga 180

tccaggacaa ggagggcatc cccccagacc agcagcggct catctttgct ggcaaacagc 240

ttgaggacgg gcgcacgctt gctgactaca acatccagaa ggagagcacc ctccaccttg 300

tgctccgtct caggggagggc atgcagatct ttgtgaaaac cctgaccggc aagactatca 360

ccctcgaggt ggagtcctct gacaccattg acaacg 396

<210> 3177

<211> 416

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-051-Q1-E1-E3

<400> 3177

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tcgctgctgg tcgccgtgct agcgggtggcc gccgatgtcg ccaacgccgg ccacgccaaag 120
cccctaacgc ctggcgggcg cgtggtacac gacaaccacg gcaagttcac ggccggggccg 180
tggaaccccg cccacgcaac cttctacggc gggcgtgacg ggtccggcac cacggcgggc 240
gcgtgcgggt acaaggacac gcgcacgcag gggtagggcg tgcagacggg ggccgtgagc 300
actgtgctgt tcggtgacgg cgcggcctgc ggaggggtgt acgaggtgcg gtgcgtggac 360
agccctagcg ggtgcaagcc cgacgcggca gcgctggtgg tgacggtgaa cgacct 416

<210> 3178

<211> 420

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-051-Q1-E1-E4

<400> 3178

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accgctcac cttccagggtc ggtaagggat ccaagcctgg ccacctgac ctcacccga 120
acgttgccac catatccgac gtggagatca aagagcatgg tggcgatgac ttctccttta 180
cgctgaagga gggcccgacc ggcacctgga cactcgacac caaggccccg ctcaagtacc 240
ccctttgcat ccgctttgct gtcaagtctg gtggctaccg catcgccgac gacgtcatcc 300
ccgccgattt caaggctggc accacttata agacgacact cagcatctaa tcagcatctg 360
aagatgaact atatttcaaa agagctcatc tggcgcacgt gttagcaaga caattttttt 420

<210> 3179

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-E5

<400> 3179

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cgcagcgagc ggtggccacg atgacgacta agaagtcct cctcgtcac acgctggcgt 120
ccgcactcca tggcacagcg ccagacgccg cgaatgctcc cggcgggggcg ttcagcaact 180

gggtggcgat gaaccagcag acctacgcgc tgtacgcgca taagtccgtc agggacggtc 240
gcaaagagcc cctggacaag aagctgtctg atgcggacaa taagaacgtc acgtacgtgg 300
tggaccccag ctgtaatggc gattacacca atatcacctg ggcgctagat gatata 355

<210> 3180
<211> 184
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-E6

<400> 3180

aacacgcgtc cacgcgctcg ccgtccttcg gtaggtggat tgcttcggtg gtccaccatg 60
gctcagcgag cggaggccac gatgacgatt gtgaagccca tcctcgtcct cacggtggcg 120
tctgcgctcc atggcacggc gccggccgcg gcgaatgcgc ccggcggggc gttcagcaac 180
tggg 184

<210> 3181
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-E7

<400> 3181

ccacgcgtcc gagegatatc tggatcgacc acctgtccat gagcagctgc gcggacgggc 60
tggtggacgc ggtggacggc tccaccgcca tcaccgtctc caacggccac ttcacgaggc 120
acgaccacgt tatgtgttc ggggccagcg acgccgcgtc caaggacagg gagatgcagg 180
tcaccgtcgc cttcaaccac ttcggcaagg ggctgggtgca gcggatgccg cgctgccgtc 240
acggcttctt ccacgtggtg aacaacgact acacgcactg gctcatgtac gccatcggcg 300
gcagccggaa cccaccatc atcagccagg gcaaccgctt ccgcgccgtc gacgacagca 360
ggttcaagga ggtgaccaag cgggagtaca cgc 393

<210> 3182
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-E8

<400> 3182

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caaaaaaacac catcatctca tccgcccgtc tcaacgccac cctagccctg tgatatacaa 120
tggcggccca gagcacgagg atgggtggcg tggccctggt ggtcctcctg gtggtggcga 180
cggcgttggt gcccacggcc accgcgtacg gctgctacga cgactgctac gagcgggtgcg 240
ccaacggcaa gaaggacgac cccgcctgca ccaagatgtg caaccaggcg tgcggcagca 300
ccgacaaggg cgccgcccgc ggcgcgccgg cttgatcgac ccgggcttta tcggcgcgcg 360
ggctcagctc gatatcatca tatacaat 388

<210> 3183

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-E9

<400> 3183

taccggtcca gaattcccgg gtccaccac gcgtccaaat ggcgttattg tatactctctc 60
tattcccgt aactgtacaa aactttgtat ttgcacacag aatgtacacg gaggtaaata 120
ttccccatac ataccctgga acaaattgta ctaattgtca cagattgact gcactcacia 180
ttacacagca ttcttttggga catttggtgg gtaaatatga aatctctttg ggaatatacc 240
tgtatatgca gtggtagaga atatcgctgt tccttttatg gtggatgcac tggaaagggg 300
agaattgtac tctgaccagc cacagcatct cttttgatca tgtccatatt ctgctgtcag 360
tgaaaaaaga gatttcatta tgtcatttaa cacggatcac caattatgtg agcagggggtg 420
tctgacattt 430

<210> 3184

<211> 435

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-051-Q1-E1-F1

<400> 3184

3185 331 DNA Zea mays

cctgcangta ccggtgcaga attcccggga cgaccacgc gtccgcccga tgatcctcaa 60
 ggcgtggaag aacgcgtgcg aggcgacggg ggtacagaag atcgtcatcc cgccggggcaa 120
 ctacctgacg ggcgggctgg agctgaaggg ccctgcaag tcctccatca tcatccgtct 180
 cgacggcaac ctgctcggca cgggcgacct cagcgcgtac caaaggaact ggatcgagat 240
 cgagaacgtc gagaacctgt ccatcaacgg ccacggcacc atcgacgggc aaggagccct 300
 ggtgtggagc aagaaccagt gccagcattc ttacaattgc aagatcctcc cgaatagctt 360
 ggtgctggat tttgtgacga acgtccagat tcgcggcatc acgctgctca acagcaagtt 420
 cttccanctc aacat 435

<210> 3185
 <211> 331
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-051-Q1-E1-F10
 <400> 3185

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 tgcctccagc aagatgatcc gatcgtggtc gtgctagtgt tcttgatgga cggcactgtc 120
 tcacggacgc cgtaatatcc ttgtatctcc tcatatcacc accagttata acaatgactg 180
 cctggatgct aataccaaat cgcattgcaa ccttactgat gccgatcgcg acgaaacagg 240
 tgacggctac gaatgcagag acgtgcacag acaccgcttc aattccatgc gtacatccga 300
 ctctatagtt atctggattg agcgtcagca t 331

<210> 3186
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-051-Q1-E1-F11
 <400> 3186

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 ctagcgggtgg tcgccgatgt cgccaacgcc ggccacgcca agcccctgac gcctggcggg 120

cgcggtggtac acgacaacca cggcaagttc acggccgggc cgtggaaacc tgcccacgcg 180
accttctacg gcgggcggga cgggtccggc accacggcgg gcgcgtgcgg gtacaaggac 240
acgcgcgagc aggggtacgg cgtgcagacg gtggctgtga gcacggtgtt gtttggcgat 300
ggcgcggcct gcggcgggtg ctacgaggtg cgggtgcgtg acagccccag cgggtgcaag 360
cccgcgcgg cggcgctggt ggtgacggcg accgacctgt gcccgnccaa ggacaagtgg 420
tgcaagccgc cgc 433

<210> 3187
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-F12

<400> 3187

ccacgcgtcc gatcctgcgg aggtcggcg ccgacatcga ccctgaccgc ctaccgcaaa 60
tcctgtacga agacgaggac cgggacaagg tgggtgctcg gtcggacgac gacctcgcgg 120
cggcggtgga acacgccagg ctgccggat ggaaggtct gaagctgttc ctggactact 180
ccggcaccac cgggcgcagg aaagcgggtg cccccacg tggcgccatg gcggtgggca 240
tgtccagccg ggacgcgtgg gcggcggcgt acagcggggt cggcgccggg gctgccctcg 300
tcaactggcat cggcgtcatg gcgtacctgc gaagatctgc ctagctagtg tgggtggcgcg 360
gcggcgcggc gcgcatattc gccaatgcaa gagcaagggg tcctgtcctg cctttcgaat 420
cacacag 427

<210> 3188
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-F2

<400> 3188

accggtgcag aattcccgga acgaccacg cgtccacggc cgtcgagcga gcagtctccc 60
aattccaccc aataactaat aacatctcct cgaacgccag gttccttgga ccactatata 120
caggagcgac gaagtgatcc acccgccagc catggagatg aagaaggtcc tctgcgccgc 180

cctcagcgtc gtengcgteg gcgtcnccgt cgtggtcagc acgcttggca aaccggccct 360
tgatttcgcg gcgctct 377

<210> 3191
<211> 268
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C8

<400> 3191

ccacgcgtca ggtggaaact ggaccgccct tgcgctgatg tggaagacaa ctccgattac 60
gatatttttc ttgttgacat tgatgccttt gctggacccc cctggcctct tgttgttcaa 120
ttggaacttc agaaacagct gcgctgttat catctctgca ttgttcgggt tccttcttca 180
gtggtctggt gctttggcac tcggcgcgac gtcagctttg tctcatgttg tgctgggcca 240
attcaaaacg atcgtcatca tgctctcc 268

<210> 3192
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-C9

<400> 3192

ccacgcgtcc gcggacgcgt gggcggacgc gtggcgctcg acgccggcct ctctctcac 60
ccgctcggac agtcggagcc cggcggcccg agggcgacgt cgtccctaata agataactaat 120
aatttatcac tatacataac caatatataa gccatgggca agcgcagcgt ccctcggtac 180
cctgaggacg aggacaaagg cggctgctgc ggctgcctgt gctggtgctg ctgcttcttg 240
ttgttcateg tggcggcgct ggccggcacg gccgcctact tcttcttcgt gtacaagccc 300
atggcgccgt cctactccgt gagcaacatg tccgtctcgc agttcgactt cagcacctcc 360
gacctgacgc tgtacgtcaa gctcaccgcc tccgtgcgcy ccgagaaccc caac 414

<210> 3193
<211> 237
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-D1

<400> 3193

tttatcaatc atcaatcaca ttgttaaata tatcacatac attttttatt attacattgc 60
atgtacgtga cattgttgta gaatagaaga gaagtatttc cccttccaaa caaacagaaa 120
agaagggaaa acgaagttag taatcgtagt atcgaacaca caatcatgtt tccctttcct 180
cgatcctctc ttcttcccaa accgagaggt gaaccagcag cctccaataa aaggcca 237

<210> 3194

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-D10

<400> 3194

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ccatagctag ccagcatggc gcccagcagc agcatagcag tactgctgct cctcgtcgtc 120
gccgtcgtcc tctccaacgt cccctcctcg ggcgccttg cctcctcgtc gtcgtctctg 180
ctgcaccagt cgtctccgtc tgagagttag actgagaccg acagtagcag cggagaatct 240
tcttcgctgt cgtcgtcgga agaggccggc gagaaggaga aggagaagga gcaggagatg 300
gagaaggcgg tcgcggcgga gaaggctgcc cagcaggagc tgctcaagta cgccaaggag 360
aagggcacgc tgtcaccgac caacggcacg ggggtgtaca agggcatcgc ccggga 416

<210> 3195

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-D11

<400> 3195

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gatggtcagg tgatcaccat tggggcagag aggttcagat gccctgaggt cctcttccag 120
ccttccttca ttggtatgga agctcctgac atccatgaga ccacctacaa ctccatcatg 180
aagtgcgatg tctacatcac gaaggacttg tatggtaaca ttgtgctcag tgggtggcacg 240

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-D5

<400> 3198

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tgctgtgaag caagcgtgca aatttgcaaa agatcatgct gttgcaaattg gcccaattgt 120

ccttgagatg gataacctaca ggtaccatgg cactctatg tcagatccag gaagcactta 180

ccgcaccagg gatgagattt caggtgtcag gcaggaacgg gacccaattg aaaggggttag 240

aaagtgtgctt ttgggtcacg acttggcaac tgctgctgag ctcaaggata tggagaaaaa 300

gaa 303

<210> 3199

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-D6

<400> 3199

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gccttcgcta cgcaattccg atccacgctg cgggccactt gtgacgactg gcggaacccg 120

cgagaaacag aggcggggcga gcggcgatcg gagatggcgc cggagaagcc ccggaaggaa 180

caggaggagg agttgatgct ggaggatgga ggcacgagg agagcccgcg ccgcagcttc 240

gaggactgcg gcgactccga ggaggaccgc ggggagggcg atgacgagga ggagcgggac 300

agcgaccgc 309

<210> 3200

<211> 359

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-058-Q1-E1-D7

<400> 3200

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actgggaggc accaagtaca tggatcatcca aggcgaacct ggagctgtca tccgtggcaa 120

gaaggggatcc gggggcatca ctgtgaagaa aacagggcag tcactcatca ttggcatcta 180
cgacgagccc atgactcccg ggcagtgcaa cctgggtggtg gaaaggctgg gcgactacct 240
gctcgaacag gggatgtaat gacaaccct tcccctggaa tgcattgtga tgatgtttgc 300
ctggggggttt ttccccccaa anaaaccccc cttttttttc cccccggggg ggttttttt 359

<210> 3201

<211> 361

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-058-Q1-E1-D8

<400> 3201

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ttagcagaag aacacacagg gtgacaacaa atccttggtc ggttatttct aatacatatg 120
gattggatga gattggaaaa aattaagaag aagtttaact tgtttgcgat tcaaacacat 180
ccaatctcat tcaattcaca tggattgaga gctaaccgaa caagcctgta gttggacaag 240
ggtgtaacac ttatttgtca ggcgtaccgg gcacagaccg cttcctattt gttcngtggg 300
ggaantggnn tttaaaaaan cccnnttggg nnnttttaaa aaaaaaaggg gggccccccc 360
c 361

<210> 3202

<211> 412

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-058-Q1-E1-D9

<400> 3202

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tcgcgctggt cctcgtggcc acggccatag ccgccgtcc cggcggtggg tttgtcgtca 120
ccggccgcat ctactgcgac aactgccgcg ccgggttcga gacaaacgtg tcccacgcca 180
tccaaggcgc gacggtggag atggagtgcc gccacttcga gtcgcagcag gtccacgaca 240
aggcggaggc gacgacgggc cccggcggct ggtacaggat ggagatcagc ggcgaccacc 300

Sequence of the clone

aggacgagat ctgcgacgtg cgcttgcctca agagccccga ggcggactgc gccgagatcg 360
accactccccg cgaccgctgc cgcgtcncgc tcacccgcaa cgacggcatc aa 412

<210> 3203
<211> 306
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-E1

<400> 3203

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cgatcgagga gggaggaacg ccagagaccc ggcggcgggc acgatggctc cgcgagctc 120
atcggcgggc acgtgcctgt gcctcgtctt cgccgcggcc acgctggcgc tggcccacgg 180
ggcgcaagga ggaggaccat cggcatcggc ggcggacctg gacaaggatca cggccgagac 240
cttcctcgac atcgagatcg acggcaagcc tgcaggccgg atcgtgctgg gactgtttgg 300
ggacac 306

<210> 3204
<211> 402
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-058-Q1-E1-E10

<400> 3204

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tgttcctcct ggtcctcttc tgcacgtgc atggtgagaa ggaagagtca aagggcatcg 120
atgcgaaagc gtccgggcct ggtgggtcct tcgacatcac caagttgggc gcctccggca 180
atggcaagac agacagcacg aaggctgtgc aggaggcatg ggcacgcggc tgcggcggca 240
ctgggaagca gacaatcttc ataccgaagg gtgacttcct tgcgggacaa ctcaacttca 300
caggcccttg caagggcgac gtgaccatcc aggtggatgg caatctgctg gcgaccacgg 360
gacctaagcc agtacanagg acatggtaat tggatcgaga tt 402

<210> 3205

<211> 129
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-E11

 <400> 3205

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 cctcctgttc ctcttctgca tcttgcatgg tcataatgaa gattcagggg tcatggggggc 120
 gaaagcttc 129

<210> 3206
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-E12

 <400> 3206

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 tgctgctcgt cgggctcgcc gcgggctccg aggaggagga ggacggcggc ggcaaaaaga 120
 agccccacgt caaccacggc aagtttaagg cggagccgtg gacggacggg cacgcgacgt 180
 actacggccg ggcgccacgg ttaaactgac acaacggaca gcggcccgtg cggctacaag 240
 ggcgagctgg ggaaagacta cggcaccctg acggcggccg tgggcccgtc gctgtacacc 300
 aacggcaccg ggtgcgggcg gtgctacgag ctcaagggcc ccaagggcac cgtggtggtg 360
 acggccacca acgaggcccc gccgccggtg agcgggcaga agggcgagca ct 412

<210> 3207
 <211> 310
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-E2

 <400> 3207

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 gcatggagga agtagctgtt tcgcctatga tcgttgccgc cgtagtgctg gacaacaatg 120
 gcgctgacgc ggtctcctgc actgccatcc ctagcgtaac aataagccta gaggagaaag 180

aaaatatcaa tggggatggt cccacgatca cctcggccgc aagcaacgag gaggaggcgt 240
 tggtcagtgt cggagaatcc accaaggacg atggccatcg cttgacgaat ggaatggcct 300
 tcccccaaaa 310

<210> 3208
 <211> 332
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-058-Q1-E1-E5

<400> 3208

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 ggccgggctcg gcctcggccc ctccagcctg ctgctccacc tgctcctcct ccactccctc 120
 ttatagcctc cagcctcccc tcgcctcccg ccacccccta tggccgcccgt tttcttccac 180
 cacgtcgtcg gcgacctcac cgtcggcaag cccgaggtcg ccgagctgca cgacaccgac 240
 acgtcgcagc acgccgcgcg cgcctcgcgc gccnagcccc cggaaggggg gggggcccg 300
 gcccccccg ggggtttttg gggggccccc cc 332

<210> 3209
 <211> 272
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-E6

<400> 3209

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 caaggaggac agcgacatgt tcaggtgcta cgacagctgc tccgacgacg tggaggaggc 120
 cgtcgcctac ctcaacggcc tcgtccggga gccaccgac gccaagttcc tcgagctcaa 180
 gtcgtggctc tctccacgc tcggcggcac ctccacctgc gaggacgcct gcaaggacct 240
 gcccaagacc agcgacaagg acgacgtcgt ca 272

<210> 3210
 <211> 273
 <212> DNA
 <213> Zea mays

tccaataata gtaacaacaa agcaaaggcc ttcctcccgg cgtatttgct ttggctcttc 360
 tcctccacgc cataagatat ctagcaattg gtgactcgcc ttaattagtt cgctttg 417

<210> 3213
 <211> 338
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-058-Q1-E1-F1

<400> 3213

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 gctagcggtg gccgccgatg tcgccaacgc cggccacgcc aagcccctga cgcctggcgg 120
 gcgcgtggta cagacaacc acggcaagtt cacggccggg ccgtggaaac cagcccacgc 180
 gaccttctac ggcgggcggg acgggtccgg caccacggcg ggcgcggtgc ggtacaagga 240
 cacgcgcgcg caggggtacg gcgtgcagac ggggtggccgt gagcaacggg ggttgggntt 300
 ttttgggggt tttttttttt tggggggggg gggccccc 338

<210> 3214
 <211> 437
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-058-Q1-E1-F10

<400> 3214

ccggtctagc cttcccgggc cgaccacgc gtccgcccac gcgtccgcgc gaggaagccg 60
 gcgggcggca gcctgcggct gcagcggcag gcgtgctgcg agccgtcggg ggcgccgtcg 120
 cgggcgggtg tcgcctgccg ggccgcggcg tcggggagcg cggccgacct ggctccggg 180
 ggcaggaggt cgtccggcgt gccggtgttc gtcattgatgc cgctggacac cgtcaaggag 240
 tgcggcaccg cgctgcaccg ccgcaaggcg gtgcaggcca gcctctccgc gctcaagagc 300
 gcgggcgtcg agggcgctcat ggtggacgtg tgggtggggca tcgccgagcg cgacggcccc 360
 ggccggtaca acttcgcggg ctacgcggag ctcattgaga tggcgcgchna agccgggctc 420
 aaggtccagg ccgtcat 437

<210> 3215
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-F11

 <400> 3215

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 attttagaag aaacagctcc agaggagctt cagaaccatg tcacagtga gctttccgtg 120
 gtggagggtc tccttgagat tgcaaaattc tgtgatgtgt atttgatgga gcgcattctt 180
 gatgatgaga gtgagggaaa ggttttatcg gccctgagtg aagctgggct ttttggtggt 240
 ggtggcttga taaaagataa ggttctcttc tgtagcacgg agaatggccg tacatctttt 300
 gttcggcaac tcgagcctga ttggcatatc gacacaagtc ctgaagttgt tcaccaatta 360
 gctaggttta tcaaatatca actgcacatc tccccgcagc gacctgaaag aat 413

<210> 3216
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-F12

 <400> 3216

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 ctctgggaga tgatgtgggc tctagaatac gaccctgaca ttttcttcgc aacatgcgaa 120
 gaacaaggtg cagtacataa aaataaagtt tctaaatcca aactgaaagg actgcgccat 180
 tttggcaagt gggataagga caaggataag gaagatgata agaatggggc tgaggacggt 240
 gaagatggtc cggttccgat ttcagtcttc atggttgcaa gtgtcctcaa ggagaagaga 300
 gaaaagctgt tacaagaagc cagaggactg gatgatctta tcaggatatt gaacgatgta 360
 aatgggaact tagatgctaa gaaagcttgc gctggagcat tgaaacttca caaa 414

<210> 3217
 <211> 353
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-058-Q1-E1-F3

<400> 3217

attcccaggt cgacccacgc gtccgggtccg gtccggttct ctccgccgcg gcggcggatg 60
gccctgccgc tctacggctg caggctcctgc gctgtgcatg atgccatcat cttctgccac 120
tgctgtgacg ccaggctgtg cctgcactgc gacgccgcgc tgcacggggc taccgaggcg 180
ggggcgctcc acccgcgcg cgggctctgc gacgcgtgcg gcgccgcgcc ggccgcgctg 240
cgctgcgacg gcaccgtgac gctgtgcgcc gtgtgcgtcg gccgcggtgc tccnnggcgt 300
tggaaccccc cccccggggg ccaaaaaaac ccccccccc cccggggggc ccc 353

<210> 3218
<211> 291
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-F4

<400> 3218

attcccaggt cgacccacgc gtccgctgag catcccaggg acggcgacaa atgggggtcgg 60
gagatccatc gtgtctgcga atctgcgtgc ttgccgttgc ggccgatggg aacggggacg 120
ggatagtgcg ggatctgctt tggaaagttt cctaattcct agtactatgc ttttacgcaa 180
aattgggtcca atttctgtat ggttcctcta aaatgtgctg tccaaacggg gccgtgttct 240
atgcaataga aatcatgcta ctcttaccat acttcgatgg ttttggcaaa c 291

<210> 3219
<211> 335
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-058-Q1-E1-F5

<400> 3219

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ggcgtcttga tatattggat tgcactgcat gctttgcttg ctagttttat ttgaactctg 120
taaagatgta gccatctcct ggcgagtgc tgtacagtac tctgtgtcta tagcaagtta 180

tatctaaaca gaagcagttt gcactgatac cgtgattcct ttcgaaaatg ttaccgaata 240
 cttgagccgt attggcagct gcagaaatct tcaaatgaat ggccaaantt tttttttttt 300
 tccccaaaac ccnccccccc ccccnctttt ttttt 335

<210> 3220
 <211> 270
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-F6

<400> 3220

ccacgcgtcc ggcggcatcc tgcagataga ggcacagggc ctgctgaaac ataaggactg 60
 cgtcgtgtgg atcactgggc tacgcgggtc acgtgatgtc tgcaaaagct gatctcgtca 120
 gatttaatta cgagcacaga tacttccttt tatatgtata cacctgtctg acagtctgtc 180
 agtccgtcag tcttgacttg atgagggaaa agcacactcg cgtgcgcgct gagccgcgag 240
 ctgtatcgca taggccacct cacgtacgtc 270

<210> 3221
 <211> 272
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-F7

<400> 3221

ccacgcgtcc ggcgagattct acgcgtggat aacctgggtc tcaccggcaa gggaaacctt 60
 gacgggcagg gccagctgt gtggagcaag aactcctgca ccaagaagta cgactgcaag 120
 atccttccca actcgtcgtg gatggacttc gtgaacaacg gggaggtgtc cggggtcacg 180
 ctgctcaact ccaagttctt ccacatgaac atgtaccggt gcaaggacat gctgatcaag 240
 gacgtgaccg tgacggcgcc cggggacagc cc 272

<210> 3222
 <211> 302
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-058-Q1-E1-F8

<400> 3222

accggtctag aattccccggg ccgacccacg cgtccgggtg tatactgatg tatgtgaagc 60
aagaaacatc agctgcaagg tactgggcaa ctgcgataag aacctggggc ccgaggcctc 120
ccgcccaggg aaacccgcc aagactacac ccgcggtgc aaccgatca ccggtgtcg 180
cggctgatca tatctctctg gtcgatgtgc gcgcaatgtc aatgtcgac gcgcgtgcag 240
gtaccaggcc ttagcgtgtg gtgccgcgtg tgtgtatata ttacacacna tgcattatac 300
at 302

<210> 3223

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-F9

<400> 3223

cgccggccat aaccggtcca gacctccccg gtcgacccac gcgtccgccc acgcgtccgc 60
gttatcctcc tcgatcttaa ttacagggtc tagctaagca ggtctgacag gatgtcgtgg 120
cagacatacg tcgatgagca cctgatgtgc gagatcgagg gccaccacct gacctccgct 180
gccatagtcg gccacgacgg cgccgttttg gccagagca ccgcattccc acagttcaag 240
acagaggaga tgaccaacat catgaaggac ttcgacgagc ccgggttcct tgccccgacc 300
ggcctcttcc tcggccccac caagtacatg gtcattcaag gcgagcccgg cgctgtcatc 360
cgcggaaga agggatctgg aggcataact gtgaagaaga cagggcaagc gatggtggtc 420
ggcatctacg acgagcccat gacccccggc ca 452

<210> 3224

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-G10

<400> 3224

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gtggccttgc tgagcgtggc cctagtgggc ctgctcctct gccacctcgc caccaccgcc 120
 tccgcccacc agaaagacat ccacgtcctc ggcagcgtcg acggctccag cgacggcagc 180
 agccccgagt ccgaaggccg cgtcgtctac gcggacatga agctggctga tacggaatcc 240
 gatgcgccgg cgccggcgcc ggcgccgggg ccgtcgtccg gttgaactga gaagcgtgcg 300
 tccagccaag caaggtggtc aaaaccgaga actaattaag ggctcgatcg tgtgtcaggc 360
 tactactgtt cttgccataa ttatatatag atacgcaaag tgtggccaag cctaccc 417

<210> 3225

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-G11

<400> 3225

ccacgcgtcc ggcgggccac gacctctcct gttgtcgtcg ctggtcgcca tgctagcggc 60
 ggccgccgat gtcgccaacg ccggccacgc caagcccctg acgcctggcg ggcgcgtggc 120
 acacgacaac cacggcaagt tcacggccgg gccgtggaaa ccagcccacg cgaccttcta 180
 cggcgggcgg gacgggtccg gcaccacggc gggcgcgctg gggtagaagg acacgcgcgc 240
 gcaggggtac ggcgtgcaga cgggtggccgt gagcacggtg ttgtttggcg acggcgcggc 300
 ctgcggcggg tgctacgagg tgcggtgcgt ggacagcccc agcgggtgca agcccgacgc 360
 ggcggcgctg gtggtgacgg cgaccgacct gtgcccaccc aaggacaagt ggtgc 415

<210> 3226

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-G12

<400> 3226

ccacgcgtcc ggcaagtcgc cttcttccca tccctctcca tcaagcaaaa gactgacagg 60
 aaagctaaac cccaacaatc accatgggat tcttccaagg caagacctcc aagcagacca 120
 cgaggggtcaa gaagcttctc ggactcgccc tgtcgcgcct cgccattgca cgccgtcccc 180
 gccttgctcg caggtccatc tgccgtaacg atgtcggccg gctcctctcc ctcggtacc 240

tccatcgcg c tctcctccgc gcagagcagg tcatagagga ggataacatg ctgcaggcgt 300
 tcgacatcat tgagctctgc tgcaagcgac tcgtcgagca cgcaacacat ttagacaaac 360
 cgcgggagtg cggcgaagag ataagggagg cggctgccgg gatcatgttt gcag 414

<210> 3227
 <211> 363
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-058-Q1-E1-G3
 <400> 3227

gtaccgctca agaattccca ggtcgaccca cgcgtccacg gccctctcct ttcgtcacca 60
 tcacatccag ccagccaaca aaaatgtcgc gcgtcacagc tgcggtgctc ttttacatcc 120
 tcgccgttgc tgccctcagc gcgggccgagg ccccggcaga gtcaccgaag gaaggcagtg 180
 ctgccaaaggc acctgaggct gccaaagagaa ctgctgcccc cgctgaagca cccggagccg 240
 cgtccaaccc cgtcgccgcc ggctggccca tcatcgtcgt ctaggaagtc tgggtccagct 300
 accgcgccag gccaaaccgg gccccccctt ttccccctta aaaaccccaa aaaaccccc 360
 ccc 363

<210> 3228
 <211> 294
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-058-Q1-E1-G4
 <400> 3228

aattcccagg tcgaccacg cgtccgttat tatgttgctc cagaggttct acacagatca 60
 tacagtatgg aagcagacat ttggagtata ggtgttataa catacattct gctctgtggc 120
 agtcggccat tctgggcaag gacagaatct gggatcttcc ggtccgtatt gagggctgat 180
 cccaattttg acgattcacc atggccttca gtatcggctg aggctaagga ttttgtgaag 240
 agatttctga acaaagatta ccgcaaaaga atgactgctg tccaagcact gact 294

<210> 3229
 <211> 367
 <212> DNA

<210> 3232
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-G9

 <400> 3232

 ccacgcgtcc gatcgaatcc gtggtgcact gcccctcccc ctccctcaca agccgccgcc 60
 gccgtgagga ctccggcgaa tggcgctccg cgtcgcctcg ggccctctcc gccgccgcgc 120
 cgtcgccact ctagggctac taaggagtca tacacatgtc agaaactaca gcagtcaact 180
 ttcagctttg attccagcta cttctcaatg ctcaaactcg acaagaagac gctattactt 240
 acctaatcca tctctgtacc aagtttggag taggtcattt gcctcagaca gcggagacaa 300
 gttcgaggct gttgtgccct tcatgggtga atctgtaact gatggaactc ttgctaactt 360
 cttaaagaag cctggagaca gagtcgaggc cgatgaaccc atagcgcaga ttgaaac 417

<210> 3233
 <211> 279
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-H1

 <400> 3233

 ccacgcgtcc gaggtgttca acttcgtgaa gctggcggag ctgtactacg ccgggagcca 60
 cggcatggac atcaaggac ccacggcgca gtccaagcac agcaaggcaa aggccgaagc 120
 tgttatgtgc caaccagcga gcgcgttctt gcccgtcatt gacgaggcgt aacgcgcgct 180
 gacggcgagg accgcgccga tccccggcgc gacggtggag aacaacaagt tctgcctctc 240
 cgtccacttc cgctgcgtcc aggaggagaa atggcgcgc 279

<210> 3234
 <211> 108
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-H10

 <400> 3234

ttacaacacc ctatagttag tggtattaaa tgctcgcttc gcgcctcgtc ctctccctgt 60
acacgatcgt ctgcttgat gtgctctggg ggccctcgca tatcgctt 108

<210> 3235
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-H11

<400> 3235

ctcgcggtgc gacacacgag tccagcgata gtctaaagaa agacgccgcc atctacaact 60
ttgtgcaaga gcgtcttcag aagtcagcgc catacaaaat gatcatggag ctgagtgcaa 120
tggagctgga ggctcaagaa atatcgcttc aggagcttct ggctcgggag aaggaggaca 180
ctgccttctg gcagcgcaac gggaagatga gatcagtctc atccaagtag gacacaatgc 240
ccctgctact tgggctcact gacgatagca gaccttcaac atcggtagtg tctaggcatg 300
aaaccctttg gagcagctgc tgcattgctg catcgaaccg tttggtgtaa cgccgcgggc 360
ttctgtcaag atcctgccct gattctgggc agattgagtt gtgtcgtgat 410

<210> 3236
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-058-Q1-E1-H12

<400> 3236

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cctgaacatg gcgacgcttc ttgatcctac caggacttat ccttacagat acagagcagc 120
tgtactgatg gacgagggca aagaggatga ggcgatcgcg gagctgtcag gagccatagc 180
tttcaagccg gacctccagc tgctccacct ccgcgcggcg ttcttcgact ccatgggcga 240
gcgcgagagc gccctgcggg actgcgaggc cgcgctctgc ctggaccgga cccacggcga 300
cacattggag ctgtacagca aagcctccac caccaatgcc gaacccaga gctaggcagc 360
cagccagccg gccggccggc aggccgccgc tctcctcgtc gtcgattcag ctgcggtttt 420
tg 422

<210> 3237
 <211> 367
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-058-Q1-E1-H3

 <400> 3237

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 caagtatgcc actccctggg tggcggcact ggttctggca tgggcacgct gtcacatctcc 120
 aagatccggg aggagtaccc agaccgcatg atgctgacct tctccgtgtt cccgtcgccc 180
 aaggtgtccg acaccgtcgt ggagccctac aacgcgacgc tgtccgtgca ccagctgggtg 240
 gagaacgccg acgagtgcac ggtccttgac aacgaggcgc tctatgatat ttgcttccgc 300
 accctcaaag ctttcaaacc cccaaaaaaa accccccccc ccccnttttt tttttccccc 360
 acaaaaaa 367

<210> 3238
 <211> 301
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-H5

 <400> 3238

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 ggactcagcc aaccccatct tcatcgacat gaagtactgc cccaacaagt tgtgtactgc 120
 caacggcgcc tccaagggtca ccgtcaagga catcaccttc aagaacatca ctggcacctc 180
 ctccaccccg gaggccatta gcctgctctg cactgccaag gtcccatgca ccggcgctcac 240
 catggatgac gtcaacgtcg agtatagtgg caccaacaac aagaccaatg gctatatgca 300
 c 301

<210> 3239
 <211> 256
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-058-Q1-E1-H6

<400> 3239
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 tccacaggta ccggcgctcc tgttaacggc agtcacgtgc gcgaatagca acgctcaact 120
 gacagcctag agtcccatga cgagggtgcg catcgtccca atcttcatcg actgtactgg 180
 ctgcggcaca tgctacgacg tgaaatgcag cgaagaagct aactgctccg gcaagccact 240
 caacgtctgc atcact 256

<210> 3240
 <211> 332
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-058-Q1-E1-H7

<400> 3240
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 gacacccttg cgcattgacct gcacacctct gactgcctgc atgagctccg gcccggcgac 120
 cacatcgaga ttcagtggag aaggaacaaa gaattcccat acggctgggtg gtatggagtt 180
 gttgggcact tggagtcatt tgatggaagc gaacactttt gtcggtgcca tcttagtgat 240
 accgtgggtgc tggagtttaa tcagtacacg ccggggtcaa ggtggaggca agcngttggt 300
 gaaaaaccgg gggnaaaaaa agggggggga aa 332

<210> 3241
 <211> 361
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-058-Q1-E1-H8

<400> 3241
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 ctgcctcct cgtctcccc taggggatcg tcggagagga atcgcaaaga gggccgtctc 120
 atccgagtta aggaagccat ggagcacaag gaggtgggt gccaggcccc cgagggaccc 180
 atcctctgca tcaataactg tggcttcttc ggcagcgcg cgaccatgaa catgtgctcc 240

aagtgccaca aggagatgat aacgaagcag gatcaggcca agctgggtgc ctctctctaaa 300
tcggacaggg ccaaantttc cgggntttt tgggaaaaaa aaaaaccccc ccggggggggg 360
g 361

<210> 3242
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-A10

<400> 3242

cgcggtgtct gttgcaactc cctatagtga gtcgtattaa gccgccgtcg cgctcaccaa 60
gtgaccggat cggtcggcgt tccccgtcga ctgtgtgcga tcgctggatc ggggtggcacg 120
ctgcgatgac tatctgtatg gcgagtcgct atacttacgc agacataagc tgctccgacg 180
tgtcttccgg acgcgtgggg ccgtgggcga gtgctgcgta gacgaggagg acgagctcgg 240
gctgatcggc ggccggcggca tcagcgccgg cgacgcgctg ctacggacgc ttgcgcagct 300
caagctgacc aagcgggtata tcagcgacgc ggcgctgctc gcggaccatc tgccgtgcaa 360
caagctcggc cggtcctact acaccaactg cgcg 395

<210> 3243
<211> 345
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-A11

<400> 3243

tgcaactccc tatagtgagt cgtattagag gacgtccctc ccgacacggg gaaccccgt 60
ccgcgcgctc gcattcgctc cgccgccatc caggtcccag ccggccgcgc gcccgcgccc 120
ccctgccggc ggccgtgccca tgccgcagcg gggctatact gcggtggtcc ccattgaggt 180
ggcgtgcgcc ggccggccgtc gacgccatca gcggcgcatg agacatcgac acccgaggtc 240
aagggccgga cgtcaccgtc cggatcgggtg tcgcctgtca ccgcgtccct cgcgggcggtt 300
aaggtcgtgc tggagttcgg tcccgtccct agcgccgcgc ttcag 345

3244-3245-3246

<210> 3244
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-A12

<400> 3244

ttcgcgggcc gacccacgcy tcaagcgggc gtcgccatcg tcggccacga cggtgccgcc 60
tgggcgacga gcacggcggt ccccgagttc aagaccgagg acatggccaa catcatgaag 120
gacttcgacg agccagggca cctcgcgccg acaggcctgt tctcggacc taccaagtac 180
atggtcatcc aaggcgagcc tgggtgccgc atccgtggca agaagggatc aggaggcatc 240
accgtgaaga agacagggca ggcaactcgt gttggcatct acgacgagcc gatgacgcct 300
gggcagtgca acatggtggt ggaaaggctg ggcgactacc tgcttgaaca gggcatgtaa 360
ctactacgta ccagctggaa tgcattgcca cgacgatggt ttcgagtttc gacttccaat 420
aatagt 426

<210> 3245
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-A5

<400> 3245

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tcgtcgatgc gggcacaggt tgcgatggtt gtggcggttg tgttcttggt gagcggcgca 120
tgggtcggtc ctcccaaagt ccccccaggc aagaacatca cggccaccta tggcaaggac 180
tggctggacg ctaaagcgac atggtatggc aagccgacgg gtgccgggtc cgacgataac 240
ggtggcggtc gcgggtacaa ggacgtgaac aagccccctt tcaatagcat gggcgcatgc 300
ggcaacatcc ccatcttcaa ggatggtctg ggttgtgggt cctgcttcga gatcaagtgc 360
gataagcctg tggagtgtc cggaagccc gtggtggtgc acatc 405

<210> 3246
<211> 286
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-A6

<400> 3246

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cgcacagtcg gtccatgcaa gaagatcacg gtcatttatg gcaaggactg gctggacgct 180
aaggcgacat ggtatggcac gcgcacgggt gcatgtccca actataaccg tgggggccgc 240
agatacaatg acgtgaagag gcccttcttc tttaacatgg gcgcat 286

<210> 3247

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-A7

<400> 3247

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ccgcccgcgc aacctcgaag gaggaggagg aggtggagtc gcccaagaaa ggagcggctc 120
tgtcgccggt gccggaggct atcgtcacg ccacagccgc aacctcgaag gaggaggagg 180
aggaggtgga gtcgccaag aaagaagcgg ctctgtcgcc ggcgccggag cctatcgta 240
tcgcccgcgc cttaacctcg aaggacgatg aggaggtgga atcgccaag aaagaagcgg 300
ctctgtcgcc ggcgccggcg ccggaggcca tcgttgccgt agcagcagtg gaagacgtgg 360
tgg 363

<210> 3248

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-A8

<400> 3248

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gagcaacacc aagcgcgtga tcttgatct caagcccggc gctcaattcc gcgagaatct 120
gttcctgaac atcaggaagc cgttcatcac gttccggtcg ggccccaaga agcccgcgt 180

cgtggtcttg aacgacactg caggcacaag cggcatcgac ggcaagccgg tgggcacggt 240
 ggggagcgcc acgctggcgg tggagtcgga ctacttcacg gcgtacggcg tgggtgttccg 300
 gaacgacgcg ccgctggaca agcccggcgc caagggcgga caggcggtgg ccgtgcggct 360
 gttcgggacc atgacgcata tctacaactg caccatcga 399

<210> 3249
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-043-Q1-E1-E11
 <400> 3249

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 caccgccct tcacgcctcc ctcaccaaatt aaggtccgc ccttttccga cattcacaag 120
 ggggacanga aatcagcggc catggcctcg attccggcga cgaccttcgc cgtcatctta 180
 tccgtcctct tctgtgccgc ngctggcacc gccgtcgaca acgacctccc cgactacgtc 240
 atccaaggcc gcgtctattg cgacacctgc cgcgccgggt tcgtgaccaa tgtcaccgag 300
 tacatcgcgg gcgccaagggt gaggtctggag tgcaagcact tcggcaccgg caagctcgag 360
 cgctccatcg acgngtgac cgacgggaac ggcacgtaca cgatcgagct c 411

<210> 3250
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-043-Q1-E1-E2
 <400> 3250

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 agcttcagga acgtggagta cgtgggcgag gcgaatcagc tccggtcggc gacgctactg 120
 gtcgtccccg acaaacttgc caagcctctg gcgtcgctgc ccgccgataa ggtgcggccg 180
 gcggtggaga accacgtcct tctcagttac ttcgacccca tcaagctgga cgagatgaag 240
 acacgcaccg ccctcctccc cagctgtctc tccgtcaccg acaagaaact cggcgtcctc 300

aactacacca gggccgacga cgggcagatg tacttcggcg ctcccggagc cccctgcgtg 360
 gccaaagctcg tcaaggctcg cgcagcgcg cgtactctg tgtccatcat ggagatcagc 420
 gagcccatct 430

<210> 3251

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-E3

<400> 3251

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 tcggcagaag cctcgtgcag acgatgccaa ggtgccgctg gggcttcttc cacgtgggtca 120
 acagcgacta cacgcactgg ctcatgtacg ccatcagcgg cagcaatgcc cccaccatca 180
 tcagccatgg caatcgctac atcgcgccgc ccaaccttgc cgcgacgcag gtcataaagc 240
 agcatgacac gccggagtcg gtgtggaaga actgggtgtg gcactccgag aacgacctcc 300
 tcatggaatg cgcccaactt aacgtcaacg ggccgcaaaa tcaacaggaa tttcaaacact 360
 acggacctca tcatgccaaag gaacgggttc aacttcaca 399

<210> 3252

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-E5

<400> 3252

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 gcgattgggt ggccgacccg caggcgaca cggcgctgga cgacatcctc ccgtgcgtgg 120
 acgtggccac ggccaacgag tcgctgtacc ggagccagga ggtgacgtcg cagctgggtg 180
 cgctggtgaa caacgtcgtc gtcaacatct ctaaccggaa cttcccgccg gggctccgcc 240
 cgctctactt caaccagtcg gggccgctca tgcccgctc ctgcaaccgg ttcaaccggg 300
 acatgagccc ccgccggtgc gcgccggcg aggtcgactt cggcagcgcg gcgcgggagt 360
 ggaagcggtt cgagtgccag accacggggc cgccggggtc ggagctgtgc gccacgccgg 420

424

<400> 3253

cgcgcgctac ggcgtgccgc ccatgaagtg ggacaggaag ctggctcg 408

<400> 3254

gaccgcg 427

<210> 3255

<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-F1

<400> 3255

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acacttcttc ggaaggaggc caccgccccca tgatggatgg cttcgaggag taaaccgcgt 180
tctcacaagc atagtaagtt gtatttgcac tcttaaaatg ttagttgttg atggcagctg 240
cacgccagag gcagattgat tgatgttgtg cctggagcac cccctccctt ggcgtggcaa 300
tgaatcggag tcgaatctcc ttgagaacgt acaggatggc ttataccac cccactaatc 360
tgttattcag ccagcgctat ttttttttgc cccctccgt gtttc 405

<210> 3256
<211> 455
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-F10

<400> 3256

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accactccct ccccggggac gccttcgacg ccgtggtgcg cgccaagctg gccctggagc 120
tgagtgccc cggggtggtg tcttgcccg acatcctcgc actggcgctg ggcgtgctga 180
ttaccatgac cggcgggccc cggtagccg ttccgctggg gcgcaggac tcgctgtcgt 240
cgtcgccac ggcggccgac gtggagctgc cgcacgcaa cttaccgtg gaccgcctca 300
tccagatgtt cggcgccaag gggttcacg tgcaggagct ggtggcgctg tccggcgccc 360
acacgctggg cttctccac tgcaaggagt tcgccaccg cctctacaac ttccgcaacc 420
aggcggggaa gccggagcag ttcgaccca gcatg 455

<210> 3257
<211> 402
<212> DNA
<213> Zea mays

cagcttggac atcttgatga atcgtaccac gacatggggtt caccaatcga ttatcagcaa 240
 gggagggtcca tgcttttttcg gaaatgatgt cctgcagttc atgactcgca cgaagtggta 300
 ggctgtgcca actatatggc tgactgttgt ctgctgcctg gccgtgaaat ctattctgat 360
 gggtcatact gttcaggacg taactatgat ggctctgttt gggatattta ttttgacgct 420
 gatcgaatac a 431

<210> 3260
 <211> 421
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-043-Q1-E1-F3

<400> 3260

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 gcacctacac gatcgagctc aaggacagcc acgaggagga catctgccan gtggtgctgg 180
 tggccagccc gcgcaaggac tgcgacgagg tccaggcgct cagggaccgc gccggcgctcc 240
 tgctcaccag gaacgtcggc atctccgaca gcctgcgccc cgccaaccgc ctcggctact 300
 tcaaggacgt gccgctcccc gtctgcgccc cgctgctcaa gcagctggac tcggacgacg 360
 acgacgacca gtaaactgta ccacggcggc gtcgcgga ggctgcacaa aactataacg 420
 a 421

<210> 3261
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-F4

<400> 3261

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 acggagagct cgaggtggtg gcgcacggag gccgggctac gcgtgggcgt gggcgtggtc 120
 tcggcgcgcc acatcgggca gctggtgctc ccgcgcagcc acgtgtcgat gcagtcggcg 180
 tggaagtagt gcatgcactc ggggagcacc cgcacgacct cgccgtcgtc gaagtcgggc 240

tggagctcac aggcgccgctg ctccggcgat acgcgctgcc gtcggcggtcc ccggtggccg 120
 cgaggggtggg gaggaggagg cgaccagcca ggggtggcctg cgtcgggggc ggggggttcg 180
 cggaggaggg gcacctcagg tactacgagg cggccccgcg gaggaaggcg gtggaggcgg 240
 tggcgaggga cctgggaaag ctccgggcca tggggctcgt cgcgggggac gcagccaagg 300
 agaaggtcct ctcggaagcc acggatcttc tgctgcanga gctgagccag atgaaggatg 360
 cggaatacaa gataaacaag atggagaaag aacagaatgc tgctatgaaa gcactgaaga 420

<210> 3267
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-043-Q1-E1-G12

<400> 3267
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 cctcgaggag gctctctcga agcgtgaggg cgggatgcgg gcgctccagg gccagacgcc 120
 ccgtcacgcc tgcgccgtgc cgtcgggggg ctccacccca cgacgccctt ccgtggccac 180
 gccgcgccac ccacctctct cgtgtgtccc cgcggcgctc tccggaggag ggtactaccc 240
 gcctctgcgg tgcagcatcg accacccgcc caccgcgtcc gaagcagacg cgctcgagac 300
 accgcgcgac cagctcaacc acctcgccca ccgcgtccac ctctcgcgac gcggcgcgac 360
 cccgatggcc gccaccaaca ccacgcccac catccgtgtc gcgccggggt ctgccttccc 420
 gcaccatgca cgtgccta 438

<210> 3268
 <211> 227
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-043-Q1-E1-G3

<400> 3268
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacaaaaa gatcaaaaaa aaaaataaaa 120
 aaaaaaaaaa aaaaaaaaga aaagggaggc cgcccaaaag gttcaaagct tagttacccg 180

tgaatgcaac ttcaaaaactc ttcaaaaagtg tcacctaaat taaatta

227

<210> 3269

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-G5

<400> 3269

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caccggcggc cttggcgga agatctacgt ggtgaccgac cccaccgacc tcgacgtggt 120

gaaccgcgc cccggcacgc tgcgctgggg cgtcatccag cccggcccgc tgtggatcat 180

cttcgcgcgg tccatgatca tccagctctc gcaggagctg ctcatgagca gcgacaagac 240

catcgacggg cgcggcgcgc aggtgcacat cgccaacggc gccgggatca cggatgcagct 300

ggcgcaaaac gtcacatcc acaacctgca cgtgcacgac gtcaagcaca ccatgggcgg 360

cctcatgcgc gactccccca cgcacatcgg ctccccg 397

<210> 3270

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-G6

<400> 3270

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cgcccgtagc agcgtgcac gccacggacg cccgcgggga ggtgcggctg gtgtggtgcc 120

agagccccgc gccgcggttc caccggcca gcgtggaggc cgcggtgcgc ggcgcgcggg 180

agctccgcct gctccggcac gccgagacgt acgttatcgg gtgccccggc ctgctgatcc 240

gcctcttccc gtgcgccgc tgcgaattgt ccggggacgt tcgctctctc tgcgccgaat 300

ccgggctcca aggccaactc aactactggc ggaccggcg gttcttctc cgcttccgcg 360

gctgcgacgc ccgctgcgtc aggggcagga tcttccgct 399

<210> 3271

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-G7

<400> 3271

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gccgcggtga gccaaagccgg cgcacgtcgc cccgggggctc acgctcacca ccgagccgca 120

accaattaat aatatatata tatagctagg atcgatcgtc agtaaaatgg caggctccgc 180

cgtcctgagg agccccctgt ccgtcctcct ctacatcctc gccgcctgtc ccgccaccgc 240

cgcggcgacg ccgaccgacg ccgccatcga cgaggcgtac gcgcatctcg tcaacctcat 300

cgctaaccag gagtactggg cggagcgcgc ggatgcggcg cacgcgtaca accgcgcggc 360

gttacagacc gaccgcgtggc cgtcgtgc 388

<210> 3272

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-G8

<400> 3272

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tcctccgact cagcatggtc gccgtcgtcc tggctgcat cgccacagta gcgctcgcgg 120

aggaagccga tccgcgggca ctgccggcac agtggaccac cgcgaagaag tacaaggcca 180

cgatggacgc caagacgcgg caggcttttcg acggcgtggt ggccgccgct acggcagaga 240

agcgggtcca ggcggtggag gccgtgctgc agcagcagct gaacatggac gtgtccctgt 300

ccaaggcgac gtcttcggg gacgagaaca actacgtgag cgtggccgcc gcctacgaga 360

aggccgcggg cgccgtcatc gcggcgacgc cggacaacaa gctccgcgc 409

<210> 3273

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-H1

<400> 3273

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cggttggtc gtcgacggcc tgcaggtggg gttctatggc aagacgtgcc cggcgccga 180
aggcgtcatc agcgacatcg tcaacaacga aatcgctatg gaccggggca tctcccctgg 240
cctcattcgc ctcttttttc acgactgctt catcacgggt tgcgacgctt ccattctcct 300
ggacgagtcg cccgcccggc agtcccaga gaaggagtcg tccgccaacg gcttcaccct 360
ggtcgggctc agaaccatcg ac 382

<210> 3274
<211> 244
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-043-Q1-E1-H10
<400> 3274

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atcaagtttt catgtctgat ctcgacattc agatcccaac tgccgtcgat cccttcgctg 180
aggccaatgc tggggactct ggtgtcgcat caggggtcaaa cgactacgtt caggtgagca 240
tcca 244

<210> 3275
<211> 357
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-043-Q1-E1-H3
<400> 3275

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ggctggggct tcgggcggca gccggtgctg accccggctc tgtactcgcc gcggaaggcg 180
caaggcccgc ggttcgggc gctggcgctg tcgaccatcg cgcgcagtga ccactccacc 240
agcgccgtgc tgcccagcg cacggtgctg gtggccggcg gcaacacgaa cgcggcgta 300

aacttcagcg gcgtggactt cccacccgag gtgcgcgtgg agcggttctc cccgccg 357

<210> 3276

<211> 295

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-H5

<400> 3276

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tgtggatgtg ttgttgcttt gaattgcgct gtcgtgttta cctactccga gtccgacaac 180

agcctcgacg ccgagtgcct tttcggttca acgatgtgct atatcttggg gccacggaac 240

ggcagatcct agctttcttt gtaaacaaga ggatgtggaa agttggctgc gtaaa 295

<210> 3277

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-H6

<400> 3277

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cgatgcacgg aggaggatgc cgccgtagct gcggagattg ataataataa gcggggcggag 120

accgccggcc cctctggcct cgtgtgctct ccccccttc tccccccaca tgcgctgccc 180

ccgccccggc ctgccctgcc ctgtgcgcc caaccagctg aatctccgca cagacaatta 240

gagtagctgc attggcgggg aaagcgcaag aagctcagca gaaatggcgg agcaggcagg 300

cgccggaagg tactggtgcc acatgtgcgc cgcggtcgtg agccccgc 348

<210> 3278

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-H7

<400> 3278

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 cgggtcgggtg gagatattct tctcgggaa caacgcgttc ctggcgctgc ggaggctcat 120
 gttcttgtag cggttggtct acctcaatgt cggcatctac cccttcacct ccattctctt 180
 gctggtctac tgcttcatcc cggcgctgtc cctcttctcg ggcttcttca tcgtgcagac 240
 gctcaatgtc gccttctctt gctacttget gactatcacc gtcaccctca tcgcgctcgg 300
 cgtgctcgag gtcaagtggc ccggcatcga gctcgaggac tgggtggcgca acgagcagtt 360
 ctgggtcatc tcgggaacaa gcgcgcacct gtacgcggtg gtgcaaggtc tgctc 415

<210> 3279

<211> 352

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-043-Q1-E1-H8

<400> 3279

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 ctctctctgg tctctccacc gccgcgggtc gccccgcgt gccgccagtc ggccaccgcc 180
 tcatcgcggt gcctcatgag ctccctcgcc gtcttctctc caccggggc tcgggttagcg 240
 gcggcgggcg gcgagcagaa gtggggccac gtggaggggt atgaagacgg tggagaggac 300
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<210> 3280

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-043-Q1-E1-H9

<400> 3280

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 gtagacaaca tggcaatcga tgagggtcagt ggtgatgctg cagagggcg cgaagagctt 180
 gaccctgcgc tcgaggagac gccgatggag gagacgatcc gtgtgacgcg cgccaagcta 240

aggaggcgca ccgccaccga ggattctgct gggaattagc tgcattgccgt tgttttccct 300
gcacattgta ttgatctttt tccgagtttt aggctcacat gttgtttgct ggaatggaga 360
tatgttggtg ttcacttggg tcttgtgaca cagagttaat taa 403

<210> 3281
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-A10

<400> 3281

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gccgcgccga ctggggcgact gaccggaacc ggctggcgca gtgcgcgcgc gggttcggtc 180
acaggaccgt ctgcggcgcg gccggcaagc tgtacgtcgt gaggggaccg agcgacgacg 240
agatgatcat cccgcggaag ggcactctgc ggcacgccgt gatccatgac tggccgctgt 300
ggatcgtgta cgcgcgctat atggtgatcg agctgcggca tgagctgatt ctgaatcaca 360
acacgacgat cgacggggccg ggcgc 385

<210> 3282
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-A11

<400> 3282

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gttcaagaaa aataccagct taccaacaac agcagcagca agcccacccg ttcgacgaca 120
tggcccgcct cggcgccggc gccgtgttg cgctcctagt ggcggtcgcg gcggtggccg 180
cgttcctcgc ggtgcccggc tcggcggaagt ccggggagct gagcgcgatg gggttgctgg 240
cggcgaaggg cggcagcggc gcggggccgc agaagtgtc gggcgcggtg ggcgagtgcg 300
acgtggacga ggcggaggag ctccgggctga gcggcgcgcg cctcgggtcc gacgacgcgg 360
tgcggcggac gctggcgag cggaagccga ccaaccggta catcagct 408

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<210>      3283
<211>      413
<212>      DNA
<213>      Zea mays

<223>      Clone ID: LIB148-044-Q1-E1-A12

<400>      3283

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taagcagggtc tgacaggatg tcgtggcaga catacgtcga tgagcacctc atgtgcgaga  120
tcgaggggcca ccacctgacc tccgctgcca tagtcggcca cgacggcgcc gtttgggccc  180
agagcaccgc attcccacag ttcaagaçag aggagatgac caacatcatg aaggacttcg  240
acgagccccg gttcctggcc ccgaccggcc tcttcctcgg cccaccaag tacatggtca  300
tccaaggcga gcccggcgct gtcatccgcg ggaagaagg atctggaggc ataactgtga  360
agaagacagg gcaagcgatg gtggtcggca tctacgacga gcccatgacc ccc          413

<210>      3284
<211>      436
<212>      DNA
<213>      Zea mays

<223>      unsure at all n locations
<223>      Clone ID: LIB148-044-Q1-E1-A2

<400>      3284

cacgcgtccg cagggagctt caccagggca cggtgttgca gggtcggaca tcaatcgcca   60
cgtccctagc tccccgccgg tgtcggggat tgäacatgtg ccgctgcgag cgaatcagtt  120
ggccgctgtc aggaatcttc aaccgcttca acgatttggt ggtgctcggg ggtcgggaag  180
cttctctggc tcacccttca catgtgtgtg gccttattgg acaaagatag ccttccgagc  240
tcgaccaatt gtcatcggg gcaatggctc caccgcgggc gggaccactg ctgcagaccc  300
atttcaactcc cttgccatca ccgcgtgagg tcacgagtca cctgaagatc atcctgggtac  360
ctggaatctc aagtcncagg tcaagaacag gtaccacagg atgaggcgca tggaggatgc  420
tgcgatatgt tcgtga                                436

<210>      3285

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<211> 443
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-A4

 <400> 3285

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 tggctctgtt gttggtgcdg ctatactcga acgccaatgg cagcaccaag ggttgcctca 120
 aggagcttgc atgcttctag accctccgtc gactgaccca tctctctagt tataattttt 180
 ctctcgctct tgcattgccc attacatgct atccattggt aacgcacaac agtaaaacga 240
 cagacatccg acagctatac tatgttcgac ggtgtaacac cctgaatttg aggggtataaa 300
 atttcttctc taaataccat ccacattcac gtgttacctc ttgtctctct ctctctctct 360
 tttccttttg attaacagta agtgaattat gcgacggttt aattatttat tttgtcaaaa 420
 cttatgtgac tcatgatacg ttg 443

<210> 3286
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-A5

 <400> 3286

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 ggctctcggt cggccacacc cggcggtccg tcatggcgac gctgtgcttc ttccgcttct 120
 ggctcggggt cggcatcggc ggcgactacc cgctgtcggc gaccatcatg tccgagtacg 180
 ccaacaagaa gacgcgcggc gcgttcatcg ccgcggtggt cgcgatgcag ggcttcggca 240
 tcatggcccg cggcctcgtg gccatcgctc tgtccgcgtc gttcaaggcc aggttcccag 300
 ccccggccta cgccgtcgac cccgccgggt caacgccgcc gcaggccgac ttcgtgtggc 360
 ggatcatcct gatgctgggc gcaatgcccc cggcgctcac ctactactgg cgcaccaaga 420
 tgcccagac ggcgcg 436

<210> 3287
 <211> 418
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-A6

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ccttgtgttc	ctcgccgtgg	cctcaccggc	ggctctggcc	gccttcgatg	tgatagagat	120
gctgggcgac	aagcccaagt	actccacgtt	cctgaagctc	ctgcaggaca	ccaaggtcgc	180
gggcgaggcg	aatcagctcc	ggtcggcgac	gctactggtc	gtccccgaca	aacttgccaa	240
gcctctggcg	tcgctgctcg	cgcataacgt	gcggccggcg	gtggagaacc	acgtccttct	300
cagttacttc	gaccccatca	agctggacga	gatgaagaca	cgcaccgcca	tcctctccac	360
gctgctctcc	gtcaccgaca	agaaaactcg	cgctcctcaac	tacaccaggg	ccgacgac	418

<211> 437

<213> Zea mays

<400> 3288

<211> 225

<213> Zea mays

<400> 3289

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tcttcggtag ctgccagtca accttccact ggacctacat tatcgcaagg cctgatcgga 120
cgactgcat acgccgctcc atcaccgctc aagtacctca ggatgaggaa agcagcggat 180
tcgtcttctc tcaagggcat cgtgtacggc agtcgggat gtgta 225

<210> 3290

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-A9

<400> 3290

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cgcatggtgg ccttcacgta cctgcgcatt gggcccgacc tgttccagcc cgacaactgg 120
cgccgcttcg ccgcgttcgt caagcgcatt acggagccgg gcgcgcggga ggcgtgccgg 180
gagcaggtgg agcgggaggc cgagggcgct gcgcacgcca cccagcccct cgtgcacgag 240
gccgccgtcg cgctcaccaa ctgaccggac cggccggcgt tccccgtcga ctgtgttcga 300
tcgctagacg ggggtggcacg ctgcgacgac tacctgtatg gcgagtcctt atacttactc 360
atacataagc tgcgccgccg tgctgctcgt gcgtgcaccg cg 402

<210> 3291

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-B10

<400> 3291

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agcatccttt cgaagaagta acacttctcc gtgaggcctg agccccctgc cgcggtgagc 120
caagccggcg cagctcgccc cggggctcac gctcaccacc gagccccaac caattaataa 180
tatatatata tagctaggat cgatcgtcag taaaatggca ggctccgccg tcctgaggag 240
ccccctgtcc gtctctctct acatctctgc cgccgtgccg gccaccgccg cggcgacgcc 300

gaccgacgcc gccatcgacg aggcgtacgc gcatctcgtc aacctcaccg ctaaccagga 360
gtactgggcg gagcgcgcg aggcggcgca cgcggtacaac cgcg 404

<210> 3292
<211> 361
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-B11

<400> 3292

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gctccagctg cggacgtccg atgccgcggg gcagcccgc tgcattcgc cggcaatggt 120
ggtgtcgtct ggcggctcca atcccaagtg cgtggccggc gccagtaacg accacgcgtg 180
ccgcgtcggc ccagtgcacg atccagtga ccatgaggag gagggtcta gcgtcaatat 240
ctacgcgcc accgccgcg ccgactacgt ctgacacgac gacggcagcg actacaaaga 300
tgccgacgtg cccaacaacg atcatctcgt catcgtcagt cattgaaagc tgtcgcgcgc 360
g 361

<210> 3293
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-B12

<400> 3293

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gcaaaaacca ccatccgtcg tcgccaaccg tagcaaggag ccaaggacat caccaccgcc 120
cagcaataat ggcgcagagc atgaggattg tggcgctggc cttggtggc ctgctggtgg 180
tggcggcggc ggcgcccgtg gccaccgcgt acggctgcta cgacgactgc tacgagcgct 240
gcgccaacgg caagaaagac cccgcctgca ccaagatgtg caaccaggcg tgcggctcca 300
cggaccaggg cgccggtgcc gccggcgccg cgccggcttg atcgcccagc gcattcatcg 360
cttcagctcg atataatcg tgctccgtca gcaaccaca tatga 405

<210> 3294

<211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-B3

 <400> 3294

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 ggtgtcatgc gccacgctgt catggctcta acaggacgag ctcaactacc cgtccatcag 120
 ggtcatcctc agataaccgc ccttcaccgc gacggcgaag cgcgccgtca caatcgtcgg 180
 cacggccagc tcgacgtaca ccgtcgccgt gaacgtgccg gcgtcagtca cagtggaggt 240
 gatcccgccg aaactgactt tcaaggcgct ggaagaagtc ctgaaatact cagtcacaag 300
 caagtcggcc aatggccaga cgcttatcgg ccctgtcgag ggggagctca aatggttgtc 360
 cggcaagtaa ttctgcgga acacgatact cgtcagtaac gaatccagga cctcg 415

<210> 3295
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-B5

 <400> 3295

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 cgacctcaag gcgtccaaca ttctccttga cagggaactc aacgccaagc tctccgactt 120
 cgggctcgcc aagctggggc ccatgggcca ccagagccac gtcagcacca gggcatggg 180
 cacgtacggc tactgcgccc ccgagtacgc catgaccggc aagctcacca agatgtcgga 240
 catctacagc ttcagcgctg tgctgctcga gctcatcacc ggccgcccgc ccatcgacgt 300
 cacgatgccg tccgaggagc aggtcctcgt tcagtgggca acgcctctgc tgagagacac 360
 gcggatgttc atgaagctgg ccgaaccgtt gctgggc 397

<210> 3296
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-B6

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tctctggctt caatatttca tatgttgact gtggttggac gatcgtctcc atcactctag 120
ccacatttgg gtggcatgga ctctcatcgt gaagaatcat caagtccatt tgacatagga 180
tttgcacccg acgttgacgc caatgacatg ttcatggttc tgacatcact gcagcataca 240
ttactacatc atcacattct caacatttat tctgggagct taacacagac atggatttct 300
cacaattcca gaactgtcat atattccttc tgagcatcaa agctgtttat cctacgtcgc 360
acgacaggac tctcagatgt tgcgttcaat acatcaacga gcttttacag ctacgaatcc 420
a 421

<210> 3299
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C1

<400> 3299

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cctgcgggtg aaggccaaga agaacgtggt ggagatgccc ggcaatggcg acgtgcccta 120
cacgcacgca aacatcagcc tggcccggga gcagctcggc tacaagcca cgacgagcct 180
ggagatgggg ttgaagaagt tcgtcaggtg gtacctctcc tactacggat acaaccgtgg 240
gacgcatacc ttccggaact catgatgtcg ctctgtcctt ccactctcgt ctgggtccac 300
acaagttgtg ggggaaattg tgttgactgg ctgttgtagt tgggttagga cagaagagga 360
ggggacggcg acagaacgat caaacggagg gccggctttt t 401

<210> 3300
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-H7

<400> 3300

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caaacatcaa tgaattgttc acgcccacta gaaaaaagggt tttgcgtgtg atggaagcga 120

tctggtgctt gcgtatgcca gcaagctgcg attctgagtg taacacataa cgatgttctt 180
tcattcttct tttttgttcc cttgttgcat caaattgtgc ctaaaccacg tcgatgtgct 240
gccatattgt caatccctga aacgggtcaat catggatgga ccgaatgcaa taaaaatata 300
ttatactaca caataacgct acctttgcta aaatactgga ctcactccta acaaataaat 360
ggcggccgct ctataggatc c 381

<210> 3301
<211> 451
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-036-Q1-E1-H8

<400> 3301

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tgtgtctgtc tggcaatcga tcgatctcca tgacgacgtc cccgccgcgc gcacgcctgc 120
tcgccatggc gctggcgctg gcattcgctt gcgtgctgct cgtcagggtcc gcggacgccg 180
ccacgcccgg cggtccgcgc tacgggtgca acccgccac ggacaggacg tgcaggccccg 240
agggcgctcg ggtggtgctg cccgacggcg gcattgacct cgacggcgac ggcgacgagg 300
acgagctgcc gcagttcgac ccacacttca cgatcctcgg ccatgcccag tgagtgtgag 360
tgcagggtgca gctggctggt tggatcatct agtcgggtgta ctggacatgc gtcgtaattc 420
ctgtcgttca ttcgacgcga gaggaattga g 451

<210> 3302
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-A1

<400> 3302

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cgcttaataa cattgtagat tggtagcgga ggtcgaggaa atggaataag acggctattc 120
caatccta atcgggacaaag tttgatgact ttgctcagct tcctcttgag atgcaatggg 180
ccatcggtta ccaggccaga gcatacgcaa gagcgatgaa ggcgaccctc ttcttctcga 240

gcgcgacgca caacatcaac gtgaacaaga tcttcaagtt catcacggcc aagctcttca 300
acctcccggtg gacgggtggag cgcaacctca ccatcggcga gcccatcata gacttctgac 360
gacgccctcc tctaactagt aactcggcag cacacgcacg ac 402

<210> 3303
<211> 424
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-037-Q1-E1-A10
<400> 3303

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ccccctgcgg ccggggcccaa ccgtttcccc cggcgcccc cccgccgccg gtggcggttc 120
cggagggggc ccgtcgggtgc cggccgggtcc gctggacatc gcgcagctgg gcgccaaagg 180
cgacggcaag tcggacagca ccccgatgat cctcaaggcg tggaagaacg cgtgcgaggc 240
gacgggggta cagaagatcg tcatcccgcc gggcaactac ctgacgggcg ggctggagct 300
gaagggcccc tgcaagtect ccatcatcat ccgtctcgac ggcaacctgc tcggcaccgg 360
cgacctcagc gcgtacccaaa ggaactggat cgagatcgag aacgtcgaga acctgtcaat 420
caac 424

<210> 3304
<211> 435
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-037-Q1-E1-A12
<400> 3304

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gcgtgggcgg acgcgtgggt gcgtgcctag catgcatgca tgtgacgacc tctcctcctc 120
gctgtctctc tgtatctgca actgcaagca aggaaattaa ttaaaagaag atcggcgcca 180
tggcggcaac gacgacgggg atgcagatga tgcaggtgca gcaggcggcg gcgttgctgc 240
tgtgcttggt tgtgttggcg gcgtctacgc gggtcgcgct gggcaactgc cgcgacgact 300

gcatggctgc atgcaacggc tggaccatcg tctgccagct ctctgtgcc agcgcatgct 360
acggagaagt cgggatcaca accttaggta cgtcggctgt attagcgaag gcagaagcgc 420
ctgcatcnag cacac 435

<210> 3305
<211> 288
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-A2

<400> 3305

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catgcataat aaaaggtgaa agctagcata agaggtacct aactctaccc tactatagag 120
aaaaagtcag cacattgcaa gaaataataa tggagacgac gacgaagctc cgggtggagcc 180
ggcccggtc cttcctctc gtcgcgcgg cgcttctggc gtccgcgcgc gcgtcgggcg 240
tcaacgtcgg ccagttcgac gaccacttgc agaagcggaa ggagctcg 288

<210> 3306
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-A4

<400> 3306

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acattcacag gggggacagg aaatcagcgg ccatggcctc gattccggcg acgaccttcg 120
ccgtcatctt atccgtctc ttctgtgcc cggtggcac cgccgtcgac aacgacctcc 180
ccgactacgt catccagggc cgcgtctatt gcgacacctg ccgcgccggg ttcgtgacca 240
atgtcaccga gtacatcgcg ggcgccaagg tgaggctgga gtgcaagcac ttcggcaccg 300
gcaagctcga gcgtccatc gacgggggtga ccgacgggaa cggcacgtac acgatcgagc 360
tcaaggacag ccacgaggag gacatctg 388

<210> 3307
<211> 429
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-A5

<400> 3307

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gaggggaaag cccagctga ggccaccatc tccacacca aggttgcacc tgagaccact 120

accatccaca ttgaggttgc ggcaaaacat gcagtagttg agaaggtgga ggaggacaag 180

gaggaggcac taacagtggc ggcgaaacaa gagccagcag ccaccattga gcctcagcag 240

attgctagtg aggtgaccac ttcggaagtg gcggtcgtcg ttgtcgagcc tgagaacaaa 300

gaggaggagg aagttgtgga gaagaccgtc atcgagaagg agaagccatc agcagtccat 360

gcagaggaaa atattgccac caacaaggtg gcagccgagc ccacgacaga attgaagaaa 420

gacacgaag 429

<210> 3308

<211> 427

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-A7

<400> 3308

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acatcaccgc ggcgctggag gatatcccgg tgagcaacac caagcgctg atcctggatc 120

tcaagcccgg cgctcagttc cgcgagaagc tgttcctgaa catcagcaag ccgttcatca 180

cgttccggtc ggaccccaag aagcccgcg tcgtggtctg gaacgacact gcggccacga 240

acggcaagga cggcaagccg gtgggcacgg tggggagcgc cacgctggcg gtggagtcgg 300

actacttcac ggcgtacggc gtggtgttcc ggaacgacgc gccgctggcc aagcccggcg 360

ccaagggcgg ccaggcgggtg gcggtgcggc tgttncggga caagacgcag atctacaact 420

ggcacat 427

<210> 3309

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-037-Q1-E1-A8

<400> 3309

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ctggcgcaact gccatgcgcg cggggtgatg caccgggaca tcaagtgcgc caacctgctg 120
gtgaacaaca gcggcgagct caaggtggcg gacttcgggc tggcgaacct cttcgcgccg 180
gcgccggcgg cgccgctcac cagccgggtg gtcacgtctt ggtaccgccc gccggagctg 240
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gcggagatgc acgcgcgccg gcccgctctg cagggccgca ccgaggtcga gcagattcac 360
aggatcttca ngctctgtgg ctgcgccccc gaagacttct ggcgccgctt ggggctctcc 420
cac 423

<210> 3310
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-A9

<400> 3310

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tgaggcggcg gaacggggag gaggatgcga gactgtcttc ttgcaggctg tctcggagat 120
catggaccgc cgtctcgacg acatatcaaa ggacatgta gcctctagat atgcacatgg 180
ctgacaaaat aacgatgtaa tcaactcaat ggctaagca aagaatggtg tactatttca 240
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagaa agaaaaacaa 300
aaagataaaa aaaaaaata aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggggggc 360
ccccctaaag gt 372

<210> 3311
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-B1

<400> 3311

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ggcgccgcga cggcatgcgc tcgaacatgg acgacctccc gggcaacttc cccgtgccgg 180

gccaccacgt gccgcgcctc accgagctct tcagccagcg ggggctctcc caggaggacc 240

tcgtctgtct ctccggcgcg cactccatcg gcggcgcgca ctgcttcatg ttctccaacc 300

gcatctacaa cttctcccag gacgccgacg tcgacctgac gctggacctg gactacgcca 360

agtggctgcg ccagatgtgc ccgccgcggc agcccgcgca cgaccccgag caagcgcc 418

<210> 3312

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-B10

<400> 3312

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atcaactcaa caatgactgg aatgatgttc ccaacaacaa aggacttcaa ttaagtgttc 120

ctgtaaatga attgggcata tgggcaaatt cctggtaaaa tgacaattaa gttccccaat 180

ggaaggcaat caactgcccc attacaccta acaaaatcct tagaatcatc aaagaatatg 240

cttttgttgc atctccctat cctgttatta atactctaga agaacacctt acacctgatc 300

ttcaagagag agtagctaag atggtccttt aagtgtctgg agacatcctg tattaccctg 360

aatccaaaca tcttcaagaa tttccttcac ctgaagctct aaaggggcgt gtcattgctgt 420

caacaaaacc ccca 434

<210> 3313

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-B2

<400> 3313

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aggtagactac ctttttgcgt tccgtatggt catggtgctt tttaggcgtg aagtatcatt 120
 tggagactcc ttatacctct gggagatgat gtgggctctg gaatacgaac ctgacatttt 180
 cttcgcagcg tgtgaatgaa caaggtgcag tatataaaca caaagtttct aaatcaaaac 240
 tgaaaggact gcgccatttt ggcaagtggg ataataagga taaagacaag gataaggaag 300
 atgctaaaaa tggggctgag gatggtgaag acggctctgt tccaatttct gttttcatgg 360
 ttgcaagtgt ccttaatgaa aagatagaaa agctgt 396

<210> 3314

<211> 444

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-B4

<400> 3314

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 acaatgcgat gagagccttg ttctctctgg tctcttctg catcgtgcat ggtgagaagg 120
 aagagtcaaa gggcatcgat gcgaaagcgt ccgggccttg tgggtccttc gacatcacca 180
 agttgggcgc ctccggcaat ggcaagacag acagcacgaa ggctgtgcan gangcatggg 240
 catcggcgtg cggcggcact gggaagcaga caatcctcat acccaagggc gacttccttg 300
 tcggacaact caacttcaca ggcccttgca agggcgacgt gaccatccag gtggatggca 360
 atctgctggc gaccacggac ctaagccagt acaagggaca tggtaattgg atcgagaatc 420
 tacgcgtgga taacctgggc atca 444

<210> 3315

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-B5

<400> 3315

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 agatggagaa ggccaagtgc cgcgcggcca tggaggccgc cgaggcggcg cagaggctgg 120

ctgacctgga ggcgcagcgg cgccgcaacg ccgaggtgcg cgcgcgccgg gaggccgacg 180
agaaggtgcg cgctctggat gccatttcca accacgactt ccggtaccgc aagtaccaca 240
tcgacgagat cgagatggcc acggagcgtt tctccgacga gctcaaaatc ggcgagggcg 300
gctacggccc cgtctaccgc gcctccctcg accacacccc cgtegccatc aaggtgctcc 360
ggcccgcgcg gcaccagggg aggaagcagt tcttganga ggtggaggtg ctcagctgca 420
atccgcacc 429

<210> 3316

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-B6

<400> 3316

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gtctttcacc ggcacgcagg acaagtgcac ggcgtgcgac aagaccgtcc acttcacga 120
cctcctcacg gccgacggcg ccctctacca taagacatgc ttcaagtga gccactgcaa 180
aggggtcctc tcgatgtgca gctactctc catggacggt gtgctgtact gcaagacca 240
cttcgagcag ctcttcaagg agaccgggag cttctccaag aacttcacgc cagggtggcaa 300
gtcatcagac aaggggtgaac tgacaagggc cccaagcaag ctgtcgtctg cattttctgg 360
taccaggat aagtgcgcag catgccagaa aacagtgtac cccgctggag aagttaact 419

<210> 3317

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-B7

<400> 3317

ccacgcgtcc gccttcattc aacgacatca tcttccacc tatcatggcc aacaaatagc 60
catctccgcc tctcctcta ttccaaggat attaagctct atggagagat ggtcgaccaa 120
gaatgaattg aacaacaata tataaggtcg catgcgcaac caaacagcta catgtacatt 180
gcaggcgtgt gtgaaattgt ttatttattt ttgcatgtg cacgcgtgag tatttgcttc 240

tccgtacata ctctatgtat gaacgtgtgc atgtgtgaac taactacatg agacgacaag 300
 gtgcaagaga catgtctggg gcgtcatttg tatggcttta atttttttta ttatatatag 360
 ataaggaaat attttcctta aaaatggagt acaagggatt gttgagaact gcttttggtc 420
 atgatat 427

<210> 3318
 <211> 293
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-C1

<400> 3318

cacgcgtccg gcttcagccg cagcttctac gaggactgcc gcatcgagtc ggtgggtcaag 60
 gaggtggcgg tgctgacggc gcagcagcgt tccaagtcca tcgagggcgc catcgacacc 120
 ggcttctcgt tcaagaactg cagcatcggc ggctcaagg gcggccagat ctacctgngc 180
 cgcgccctggg gggactcctc cggggtcgtc tactcgtaca cgaagatggg ggaagaggtg 240
 gtccccgtgg gctgggacgg ctggcagatc gccaaagcgg agagcagcgg cat 293

<210> 3319
 <211> 296
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-C4

<400> 3319

ccacgcgtcc gggcggggat gtgcggcatg ccgccctgct cgttggttctc agatgcagca 60
 tgcgtgcact acgtgcgggt ggctggcatt tgcacgctg cgcacttgcc tctgggaact 120
 tgcattaccg gggcgtacat tgaggcgtg ggcatcttct ggatgcgtgc ctatcggtac 180
 aaactctgat gttcactccg gacgattcgt tcgacgcagt tgagttcctg cgtcgcgact 240
 ctcgctctct acgctaata cgtggctgac atgggaagac acatcgacgc ctccac 296

<210> 3320
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-C5

<400> 3320

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ccttcgctcc ggccttgatg tgggtgccca gttcctcgct gggcagtgcc gagcgtaac 120
cgagaaggtc gcgctctcgc cgggtcaagtc tggaggacga gctgctcaga atgcgtcgtc 180
agcattgaga gaagtcattg gctcctacac aaatgcaatc cgccgctcgtc tacgtctcga 240
ccaacgcgtg aggttacgag ccacctgaag aacaagttgg tagctggaat ctcaagtccc 300
aggtcaagaa caggtaccgc aggatgaggc gcttggagga tgctgcgatg tgttcgtgag 360
aggtctaggt cgctcgtctcc cagtcaactt tgggttgctg gaccgttgct tccatataat 420
gtaataattt a 431

<210> 3321

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-C6

<400> 3321

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tgcccgcgga tgctcgcaac gccggccacg ccaagccctt gacgcctggc gggcgcggtg 120
tacaccacaa ccacggcaag ttcacggccg ggccgtggaa acccgcccac gcgaccttct 180
acggcgggcg ggacgggtcc ggcaccacgg cgggcgcgtg cgggtacaag gacacgcgcg 240
cgcaggggta tggcgtgcag acggtggccg tgagcacggt gctgttcggc gacggcgcg 300
cctgcggcgg gtgctacgag gtgcgctgcg tggacagccc cagcgggtgc aagcccagcg 360
cggcgggcgt ggtggtgacg ggcaccgacc tgtgcccggc caacgaacag cagtccgcgg 420
acagc 425

<210> 3322

<211> 460

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-C7

<400> 3322

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gcacgagcac atcctccggc gaccaccggc ctccctctcc gtcctctagc gaccgaccaa 120

cgcgctcgagc gaagatgtcg tggcagacgt acgtggacga gcacctgatg tgcgagatcg 180

agggccacca cctcacgtcg ggggccatcg tcggccacga cggcgccacc tgggctcaga 240

gcaccgcatt ccccgagttc aagccccgagg agatggctgc catcatgaag gatttcgacg 300

agccggggca cctcgccccg accggcctga tactgggagg caccaagtac atgggtcatcc 360

aaggcgaacc tggagctgtc atccgtggca agaacggatc cgggggcatc actgtgaaga 420

aaacagggca gtcactcatc attggcatct acgacgagcc 460

<210> 3323

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-C8

<400> 3323

ccacgcgtca gtggagatgc agatgcaaac tggtgtatgt ggtggtgctt atattgctat 60

cctgttgctt gattgtacgt gttgtcgtcg tggcaaatgt tcagtgggtg taaaatatga 120

ggtcgtaccg tgacctcaaa ctaagggaaa aaggcaattg tatgacccca gatgggttaa 180

taaaaataat tggacagttt ccggcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaagag agcaaaaaaa aacaaaaaaa aaaacaaagg gacacaagaa aagaacgaac 300

aaaaaacaag caggcaacac gtacaaacaa aaaaaggggg ggcccccc 348

<210> 3324

<211> 134

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-C9

<400> 3324

ggtcgaccga cgcgctccgaa cacgcatctg cggacgcgtg ggcggacgcg tgggaatcat 60

gcgaactgca gtaaaggaat cggacaacgc gcggagaaaa aggggcggcc gctctagacg 120

atccaacctg gagc

134

<210> 3325

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-D10

<400> 3325

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ccgacccgcc gtcaccgttc agtccaaca cggcgcacca ccccgctctc gtgcccacca 120

cacctagggt gtccttatcg tgctcgctgt tcggccacat ggtgaccccg cccaccgaca 180

caccgccgat caccgccacc aagaagcagg acgacaagcc gaagccgacg ccggaggccg 240

ccaccgcggc gaactacgag tcgttggtgt cgccaagcg cctcatgcag cgcgctgccc 300

gcgctttccg ccgcagcagg tcgcgcgccc gcgtcaggac ggtcaaggac ctcgccgagg 360

aacgggcctc agtgctcgcc gccagcaaca aggtctccga tgaagcggcc gcggctaccg 420

cggtgccgcc tgc 433

<210> 3326

<211> 437

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-D12

<400> 3326

attcacgggt cgacccaagc gtccgcccac gttccgcgc aggcgggtgg tcggcgcttc 60

actatcaaca accgcgcgcg tccggttaaa tttctcctca accggcaagc gcaattctgt 120

gcctcaatca attcggtcgt aaggcaattg agcaagcaat atatatatat atatatatat 180

atatatagga gattcttcga gcgagctagt agcgagatgg gttccgccgt cctcttttac 240

tgcattctga tcgcgcgcgt cgctgcattg tcgtcgtcca tggtcgccgt cgggtccgcc 300

gccccggggg aaacccccaa gttcatctcg gcgagcgcgc ttgagtgtc cgctaacgta 360

acggaaatag caaaggcgcg caagctgatc gatgtccatg gccacgggct gtgcccgggtg 420

cggttcgnac acacgcg

437

<210> 3327

<211> 431

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-D2

<400> 3327

cgccggtcta gaactcacgg gtcgacgcac gcgtccaggt gagcgcccg gactcgggtga 60
agctgacggg cgggccccgag tacgcggtgc ccctggggcg gcgcgactcg ctctgtgtcca 120
accgcgagga cgccgacaac ctgccggggc cggacatcgc ggtgcccaag ctcatcgacg 180
agttcgacaa gcagggcttc aacgtcgagg agatggtcgc gatgctgggc ggcgggccaca 240
gcatcggcgt ccgcaagtgc ttccttcacg gagaccgacg cggcgcccat cgaccccaag 300
tacaagaaga cgatcagcga cgcgtgcgac ggcaaggact cgggctccgt cnccatggac 360
tccacctcgc ccaacgacct ggacgggagc tacttcggcc tgggtgctgga gaaaaaatg 420
ccgctcaaca t 431

<210> 3328

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-D5

<400> 3328

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cgcagtgccg ccccgaggcg ctggtgcagc aggtggccgc cgcggcgcgagg gaggccggcg 120
tgggcctggc cggcgagaac gcgctgccgc gctacgacga cacggcgcac gaccaggtgg 180
tgggcacggc cgccgacagg gccgccgagg accgcatggt ggccttcacg tacctgcgca 240
tggggccccga cctgttccag cccgacaact ggcgccgctt cgccgcgttc gtcaagcgca 300
tgacggagcc gggcgcgcgagg gaggcgtgcc gggagcaggt ggagcgggag gccgagggcg 360
tcgcgcacgc caccagccc ctctgtgcac aggccgccgt cgcgctcacc aactgaccgg 420
a 421

<210> 3329
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-037-Q1-E1-D6

 <400> 3329

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 ggggaaaaca cgtacattca cccggcggca ataatggcct cggttccggc tccggcgacg 120
 acgaccgcgg ccgtcctcct atgcctatgc gtcgtcctcg cctgtgccgc ggctgactac 180
 ccgaatctct ccgactacgt catccatagc cgcggtgtact gcgacacctg ccgcgccggg 240
 ttcgtgacca acgtcaccga gtacatcgcg ggcgccaagg tgaggctgga gtgcaagcac 300
 ttcggcaccg gcaagctcga gcgcgccatc gacgggggtca ccgacgcgac cggcacctat 360
 acgatcgagc tcaatgacag ccacgaggag gacatctgcc aggtggtgct ggtgggc 417

<210> 3330
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-037-Q1-E1-D7

 <400> 3330

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 ctataccctc tttaggtcaa gaggggtggag ttctccttat tcggaggaag agtcccatcc 120
 tcattctaca ataccaaacc aataaatggc ctctagccca cagtcctcgc catcatcctc 180
 caagaagtcg tcgacaccac aagaagcatc ggctttggcg ccaaaatcat cttcaaagtc 240
 atcctcgcca ccaaagggtg agtcaaattc ttctcccatt cctccatcga aatcgtccct 300
 gtcaccagcg ccagtaccag agaaaagtgg tagtacgtct atctctaaag atgggaacac 360
 gaagaagtcg tcctcatcgg cgctcctcggc agat 394

<210> 3331
 <211> 422
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-D8

<400> 3331

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 cctccctcac caaataaggt cccgcccttt tccgacattc acagggggga caggaaatca 120
 gcggccatgg cctcgattcc ggcgacgacc ttgcgcgtca tcttatccgt cctcttctgt 180
 gccgcggctg gcaccgcgt cgacaacgac ctccccgact acgtcatcca gggccgcgtc 240
 tattgcgaca cctgccgcgc cgggttcgtg accaatgtca ccgagtacat cgcgggcgcc 300
 aaggtgaggg tggagtgcaa gcacttcggc accggcaagc tcgagcgctc catcgacggg 360
 gtgaccgacg ggaacggcac gtacacgac gaactcangg acaaccacga ggaggacatc 420
 tg 422

<210> 3332
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-D9

<400> 3332

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 ccatgccaaa gacctacgac ggaagatacg tgatccaagt gaaggaggga gtgtacgagg 120
 agtacgtgac catcaccaag actatgaaga acgtgacctt cttaggtgac ggctccaaga 180
 agtccatcgt caccggcaag aagagcttcg ccgacgggat cagcactttc aagactgcaa 240
 ccttcaactgc gcaaggcgac ggattcatgg cgatcgggat ggggttccaa aacacggccg 300
 gcgcggagaa gcaccaggcg gtggcgctgc tgggtgcagtc ggacaagtcc atcttcctca 360
 actgcaagat ggacgggttc caggacacgc tgtacgcgca ctcca 405

<210> 3333
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-E10

<400> 3333

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ttcgggtggc caccatggcg cagcgagcgg tggccacgat gacgactaat aagccccctcc 120
tcctcctcgc cctggcgtcc gcgctccttg gtgcggcgcc ggccgccgcg aacgcgcccc 180
gcggggcggt cagcaactgg gtggcgatga accagcagag ctacgcgctg tacgcgcaga 240
agtccgtcgg ggacggggggc aaggagcccc tggacaagaa gctgtcggag gcggagaaga 300
agaaggtcac gtacgtgggtg gaccccagcg gcaagggcga ctacaccaac atcaccgcgg 360
cgctggagga tatcccgggtg agcaacacca agcgcgtgat cctggatctc aagccccggcg 420
ctcagttccg cgagaagctg ttctctga 447

<210> 3334

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-E12

<400> 3334

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caccaccgcc cagcaataat ggcgagagc atgaggattg tggcgctggc cttggtggcc 120
ctgctggtgg tggcgggcggc ggcgcccgtg gccaccgcgt acggctgcta cgacgactgc 180
tacgagcgct gcgccaacgg caagaaagac cccgcctgca ccaagatgtg caaccaggcg 240
tgcggtcca cggaccaggg cgccggtgcc gccggcgccg cgccggcttg atcgcccagc 300
gcattcatcg cttcagctcg atataatcgc tgctccgtca gcaaccaca tatgattcga 360
tcaatcttcc tcctctaatt tctcgacccc gtcgaatttt ttctcttctt attcttctac 420
tatactacta tta 433

<210> 3335

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-E2

<400> 3335

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 acatcctcgc cgtcgctgcc ctacgcgcgg ccgaggcacc ggcagagtca ccgaaggcag 180
 gcagtcctgc caaggcaccg gccgagtcac cgaaggcagg cagtcctgca gtccttgcca 240
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 cccccgccgc tgcgctgcc ccacgctcgt cgtcgtctag gaagtctggt ccagctgccg 360
 cgccgaccac cgccgcctct acaccgtctt cttccacgga cgaagagttg agccct 416

<210> 3336

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-E4

<400> 3336

gtgcggtcaa gaattaccgg gtcgaccac gcgtccggca aaaaccacca tccgtcgtcg 60
 ccaaccgtag caaggagcca aggacatcac caccgcccag caataatggc gcagagcatg 120
 aggattgtgg cgctggcctt ggtggccttg ctggtggtgg cggcggcggc gccctgggcc 180
 accgcgtacg gctgctacga cgactgctac gagcgctgcg ccaacggcaa gaaagacccc 240
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 ggcgccgcgc cggcttgatc gccacgcgca ttcacgctt cagctcgata taatcgctgc 360
 tccgtcagca accacatat gattcgatca atcttctctc tctaatttct cgaccccgctc 420
 gaattttttt ccttt 435

<210> 3337

<211> 432

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-E5

<400> 3337

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 gggatgacca tgaaatggcc aaagttattc taagatcact cattttttgc aatcctacgc 120

aagttcaatt aattcgtggt gatcctagat ataagctaata gtctcccgag gaggttatag 180
gaaagtttgt gagctttgaa ttgatgatca aaggctccaa acaaatacatc aacttggagc 240
aaggcggcac ctccacacccc gaggtgcaac ccgtcgcatt caaaggcaac agaggaaaag 300
aaagaatagt ctcaatcaag taggctttcc atcgacgcct ccaagctcga caacgaggaa 360
atggcactca tcatcaagag cttccgccaa atcctcaagc anaggagagg gaaggagtac 420
aaaccccgct cc 432

<210> 3338
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-E6

<400> 3338

ccacgcgtcc ggcttcgtca acgtcgggtg ccgccgtgcg ccggcgctgg cggtcgggtg 60
gtggtcgcgg cgccgggtgc tggcgggatc ggaagatctc catcccagcc tcgcggctct 120
agcgcttgag cttgcccgca aggccggcgc cggcgccggc gccacagggc tgcgcgcaga 180
tctcacgtgc ggcgccggtc cgtgcctccc cacctgatct cctccccccc atcctacgcg 240
ccgggcgccc gcgctggtcg tccacacgct gtcgcgtgt cgcgtaacgc gcattcttgg 300
acagcccaga cactccgcct tcgtttggca gcagccaagc aaagcaagat cccctcttcc 360
tccactttct atttgtccgc agtg 384

<210> 3339
<211> 427
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-037-Q1-E1-E7

<400> 3339

ccacgcgtcc gcgtcggcgc aggagcagga gcaggcggc tcggagcagc tgtgcgaggg 60
ggtgtcggcc gtcgtggcgg cgcccgagg gatggagaag ccgctgacgg ctgtggcgga 120
ggcgttcgag gagctggcgc gcggcatgga ggccgatggc ggggagctcc gcctcgctcc 180

cttcagcgac tcctgcgctc tcgtctccgt gctcttcagc agcctcggga tggccttcag 240
gttcgccgag atcgagtaag tcaccaaggt gaacgatctc atcgggtgccg gcaagtccgt 300
acgcacgttg agcgacatcc tcgacaagga catccagaat gactgcgtga agaagcaggg 360
aagccactcc cggaacttac gcacgggtccg tctcggggcct cggcctcatt aaaggccctc 420
ttcgagc 427

<210> 3340
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-E8

<400> 3340

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tctttaaccc acaccgccac gccacctcga cacgatggcc gacgatgatg ctgccgctgc 120
tgcccgtcgt gctttggagc agcgtgttgc tgctttcact gctgaagaac gccgcgagggc 180
tgcccgccaa gaagctgcgc gcctggaggc tgcgcgccctc gaggccgagc gccgtgacgc 240
tgcgcgccctg gagcaggagc gacgcgatgc tgacgcccct gccttggtcg ccgccggcga 300
agttgctgcg gctactgctg ctcttcatgc tcaagcagcg gcgatcctca acgtcaagtc 360
tctcgttccc atcgtctctg acttcacgtc gccgcacttc aaccgatggc gtggcctctt 420
cctcaacact ctcgagc 437

<210> 3341
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-F1

<400> 3341

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acctctctc ctcgctgtct ctctgtatct gcaactgcaa gcaaggaaat taattaaaag 120
aagatcggcg ccatggcggc aacgacgacg gggatgcaga tgatgcaggc ggccggcgttg 180
ctgctgtgct tggttgtgtt ggcggcgtct acgcgggtcg cgctgggcaa ctgccgcgac 240

gactgcatgg ctgcatgcaa cggctggacc atcgtctgcc agctctcctg tgccagcgca 300
 tgctacggag aagtcgggat cacaacctta ggtacgtcgg ctgtattagc gaaagcagaa 360
 gcgcctgcat cagcaccaca agcagcacia gagcgaagcg ccgcc 405

<210> 3342
 <211> 188
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-F2

<400> 3342

ggtcgaccca cgcgtctaca cacgcgtccg cccacgcgtc cggcttgta gcacaaataa 60
 acagatcgat cgattacagc aatggcggcc aaggtgttcc tcctcctccg actcagcatg 120
 gtcgccgtcg tcctggctgc catcgccaca gtagtgctcg cggaggaagc cgatccgcgg 180
 gcactgcc 188

<210> 3343
 <211> 342
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-F3

<400> 3343

cgggtcgacg cacgcgtcng cccacacgtc cgccgacgaa gacgtggtga aaccgcgccc 60
 cgggaagctc cgggtggggcg tcattccaaat tgaaccgctg tggattacct tcgccaagac 120
 catgatcatc acgtcaagg aggagctcat catccgcggc gacaagacca ttgacggccg 180
 cggcgtgcaa gtgcgcatca acaatggcgc gcagctcacg ttgcaattcg tcaacaacgt 240
 catcatccac aacatccaca tcaacgacat cgtctcctcc aacaaggacg gccgctacgt 300
 ccgcgactcg ccggaccact tcggctggcg caccgtctcc ga 342

<210> 3344
 <211> 428
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-F4

<400> 3344

cacgcgtccg ctcaccccg cttcacgcct ccctcaccaa ataaggtccc gcccttttcc 60
gacattcaca ngggggacag gaaatcagcg gccatggcct cgattccggc gacgaccttc 120
gccgtcatct tatccgtcct cttctgtgcc ggggctggca ccgccgtcga caacgacctc 180
cccgactacg tcatccaggg ccgcgtctat tgcgacacct gccgcgccgg gttcgtgacc 240
aatgtcaccg agtacatcgc gggcgccaag gtgaggctgg agtgcaagca cttcggcacc 300
ggcaagctcg agcgtccat cgacgggggtg accgacggga acggcacgta cacgatcgag 360
ctcaaggaca gccacgagga ggacatctgc gaggtggtct tgggtggagag cccgcgcata 420
gactgcga 428

<210> 3345

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-F5

<400> 3345

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agcggcagcc acacggccga gatgcacgag tccctttcca atggagccgg cggcaccctc 120
ccccttccca acggtcgggc agcggctgcc ggggcggcgc ggtcgcgcct gggccgcgac 180
gggccgcct ccgagctgga cgtgatgaag gagaagttct ccaagctcct gttaggcgag 240
gacatgtccg gcaccggcaa gggcgtgccg tccgcgtcg cgctgtccaa cgccatcacc 300
aaccttgctg cgctccgtctt cggcgagcag cgcaagctgg agcccatggc gcccgcaccc 360
aaggagcgct ggaagaggga agtcggatgg ctgctctccg tcaccgacct caacgt 416

<210> 3346

<211> 339

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-F6

<400> 3346

ctcacgggtc gacccaagcg tccagcgcca tccgccgcag caggtcacgc ggcgggtgtcg 60
tcaggacggt caaggacctc gccgacgaac gggcgggcgt gctcgccgcc agcagcaagg 120
tctccgacgc ggcgtctgcg gtgccgccgc tgctctctgg tgtcgagacc gccagcagca 180
acggtgcccc cggcggcagc gtggagggtg aggataagca gcgggcggcgc cagcagcact 240
gccacccccga ggtcgttccc gagaagatca tacgggagga cgcgccgcca gttgttgctg 300
agaccgctgc ggccccacca ccacggaggt ggaggtgga 339

<210> 3347
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-F7

<400> 3347

ggtctagaac tcccgggtcg acccacgcgt ccgccacac gttctgcgaa cgcgtgggcg 60
gacgcgtggg cggacgcgtg gggcctggcc tgggctggcc gcctccgacc accgtacgtc 120
ctccaccgcy tcgccgccg cggcctctg cccagcccgg gctgcctgcy agggcttctg 180
atggccctcg acgcgctct ttcctcctag tgcccagctt tattgcagat ccagccctct 240
gatcctcgtc ttctttcacc tctccaacat gaaggtaac accaagatca agctggagcc 300
ggtcatgggg ccgtcgctgt ccctgccgcy gagcgccagc gagctacccg acccgccgtc 360
aacgttcagc tccaacacgg cgcaccaccc cgttctcgtg cccaccacac ctaggttgct 420
cttatcctgc tc 432

<210> 3348
<211> 193
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-G11

<400> 3348

gggtcgacca cgcgtccgga aatttccgca agttcagcac cagaagccca attccaagtg 60
gtaaaaacct caactccaag tcgtaccctt cctaaaggct caaccgggaa cccatggccc 120
ggtcaaaaac ttcagggtgga acaatcccaa aattcaacag ttcaagggac cagcccgtaa 180

acaagggggt taa

193

<210> 3349

<211> 237

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-G2

<400> 3349

atagtgagtc gtattaaagc acgccctcgc gtcaccggc gccccgccc tccccacgc 60

tggccgcacc cgcaatgggg tgccggcggt cggccgcaa cggggccggg ccccggcggc 120

gggggtgggc gcgggcgcgg atacgggggt acagcgagga gtcgacctcg ggtctgcagc 180

cgccgtcgcc gccgccgcaa gaggccagcg agtcgtcgga cgggggcaag aggcgag 237

<210> 3350

<211> 383

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-030-Q1-E1-E3

<400> 3350

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acgtgactat gctgaggctc cacgggtggg aggtgtcgcg cgagtgcgcg cgcacgctgc 120

gcgtcgccac cattctgctg aagaagggtg tggagagggg cctcaccgcc ttccacatcg 180

ggagcatcat gtgcagagag accctgacca aggagtccgc catcgaagag atcgtccgtg 240

aggcggcgga acggggagga ggatgcgaga ctgtcttctt gcangctgtc tcggagatca 300

tggaccgccc tctcgacgac atcaaagaac atgttagcct ctagatatgc acatggctga 360

caaaataacg atgtaatcaa ctc 383

<210> 3351

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-E5

<400> 3351

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tccatggctg tctcctgag ccactatcgt cctcgtcta cactatttgc atttaciaaac 120
gaggaacgag tgaagcaacg gctagcactc taccagggcg tcatccctat tcacatgcag 180
ttctctgacg acgcagaaga aactttctcc agagcaatta gcagcttgct gaaagcacia 240
tatgtgaaga agggagacta cgtcactctt gttcagagcg gagtgacttc aatctggaga 300
gaggaatcca ctaccacat ccaagtgagg aaagttcagg tctgatgtgc cggtgggaa 360
tggtcgtctg agaaattttg atagcgccgc ctgatgtgtt atcatcatt 409

<210> 3352

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-E6

<400> 3352

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cctccccctc cggcgccccg ggcgagcagc gcgacagccg acagccggtc ggccagccag 120
cagcgcgggg ctgagcctgc caggccgcct gagttgacct ctgtcctccc cctccctgcg 180
ttttgttctg aggaagaaag cctgttttgc gaaaatgcct cgacaaaata gactgcaata 240
cgttcctgag cttcgaggaa tcgacagtca agctttgacg accaagtgat caagctcttc 300
gagttctacg agattgaata cctgagcat ctgtttggtg aagggtgatg ctggagactt 360
cgctgatgac gatgatgagt tttaagtcca acga 394

<210> 3353

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-E7

<400> 3353

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cttacciaaca acagcagcag caagcccacc cgttcgacga catggccccg ctcggcgccc 120
gcgcggtgtt ggcgctccta gtggcggtcg cggcggtggc cgcgttcctc gcggtgcccg 180

cctcggcgaa gtccggggag ctgagcgcgga tggggttgct ggccggcgaag ggccggcagcg 240
 gcgcggggccc gcagaagtgc tcggggcgcg tggggcgagtgc cgacgtggac gaggcggagg 300
 agctcgggct gagcggcggc ggcctcggct ccgacgacgc ggtgcggcgg acgctggcgc 360
 agcgggaagcc gaccaaccgg tacatcagct acgcggcgct gcg 403

<210> 3354
 <211> 227
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-E8

<400> 3354

gttacaacac cctagagtga gtcgtattaa ccgagccagt cgattgttca cgatcgatag 60
 cagcttacca acaccaacag caccaggccc acgcgttcga caacatggcc cgcctcggcg 120
 ccggcgccat gttggcactc cgagtggcgg tcgcgggtggg ggccgcgttc atccccgtga 180
 cggctcgcgc gaagtccctcc gacctgaggc cgatgggggtt gctggcg 227

<210> 3355
 <211> 324
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-E9

<400> 3355

ccgggtcgac ccacgcgtcc ggatacgctt gggcaagcgc agaaacctca gtgcgcatga 60
 cgccggcgatg attgcggggcg cggacaccgt ctgagtccga tagcggacgt cgatcggctc 120
 ggcgtcgctg gagccgagcg cgtaaattgg aactgcgtag cgcaataaccg cgataaggca 180
 aatggcggca cggagctgcg tcgtgtggag cacgtcgtgg atcgaagacc gctagcaacg 240
 agagatgttg caccctgccca gcaggggtgc gttgaatttg ccgcaaccgg acatgaggca 300
 gcgaatttat gtagaagtgg aatg 324

<210> 3356
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-F10

<400> 3356

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tcctctttctg catcgtgcat ggtgagaagg aagagtcaaa gggcatcgat gcgaaagcgt 120
ccggggcctgg tgggtccttc gacatcacca agttggggcg ctcgggcaat ggcaagacag 180
acagcacgaa ggctgtgcag gaggcattgg catcggcggt cgggcgccact gggaagcaga 240
caatcctcat acccaagggg gacttccttg tcggacaact caacttcaca ggcccttgca 300
agggcgacgt gaccatccag gtggatggca atctgctggc gaccacggac ctaagccagt 360
acaaggacca tggtaattgg atcgagattc tacgcgtgga taacctgggc atcaccggca 420
aaggaaacct tgacgg 436

<210> 3357

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-F11

<400> 3357

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ggaagcatcg aggcactggc ttgcctgggc tgatgatgac cttccttttg catgcatgca 120
tggtatctca tccttgatga tgatctagct cactagtctt ttttaatttc cgcttcattc 180
gctttttcaa attcgattgt gtttcagcca agttgtttag cgggacatct cttgtctgat 240
cttcctgcta aatagagttg gactcctata tatagaggcc ttccggcaca tataatatac 300
gtcggaccaa tattattgtg atcactagtt atgtctctat atgttgcgac ggggataaaa 360
aatttgaatg aaacatagat cacatttcac acaat 395

<210> 3358

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-F12

<400> 3358

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ggcctcctcc cgcaggcgct gggtaagggt aggggaggca ggggacacgg tggcgccgtc 120
aaccgcgagg tcgccggcat ctgctctcgc acccgttcc cggaggtgtg cacgtccacc 180
gccggggcggc acgcgtccaa gtacccggtc atcgacaacc tggccgtgct gaacatgcag 240
gtggacgcgt tcgccaagcg caccgcgcag gcgcgcaagc acgtcgcgag gtcggcccg 300
accatcccg cgcagcagac gcaggcgctc acgttctgcg acaccatgta catgaacacg 360
caggacacca tcggcgcggc gcagcggggc atcacgttca aggacaccgg caccgccaag 420
atcatgctgc agtcgccg 439

<210> 3359
<211> 363
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-030-Q1-E1-F2
<400> 3359

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ccacgtctcc tacagcgcaa tcaccatggc gtcggcagg gccaaagatac gtgcatggaa 120
agagtgggag aaagaagctg caggacaaga ctacgagttc tcacatgacc cgacgcgggt 180
caagttcacc cacgagactt ccttcgtgag gcagcatatg aatgtgctga acaagttccc 240
agcatcattc tacatcagca acttcttccg gcagttcttc aggtccgtga ggcangcaga 300
ctactgcgcg ctgcgccaca gctttgtcaa cgtccatctg gcccttgga gcaagtttga 360
ttt 363

<210> 3360
<211> 390
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-030-Q1-E1-F3
<400> 3360

attcacgggt cgacccacgc gtccgggaaa aggagcgaag agagagagag acgcaagccc 60

gccggcgacg atcgacgagg gatgaacgcc agagacccgg cggctgcgac gatggctccg 120
 cgcagctcat cggcggcgac gtgcctgtgc ctgcgtctcg ccgcggccac gctggcgctg 180
 gcccacgggg cgcaaggagg aggaccatcg gcatcggcgg cggacctgga caaggtcact 240
 gccgagacct tcctcgacat cgagatcgac ggcaagcctg caggccggat cgtgctggga 300
 ctgtttgggg acaccgttcc taacacagca gagaacttcc gagcactttg cacaggggag 360
 aaaggaatgg ccaagtccgg caagcctcta 390

<210> 3361

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-F4

<400> 3361

cacgcgtccg aagaagtcgt ctaattcttg gatcgaatta gacgacttct tcgtccctct 60
 cttcattagc acgctaactt gtaatctgca ggatctaagc aaagacttga tttagttatg 120
 gacggatttg taggcctctt gaaagttcgc gtgggtccgg gtatcaacct tgcctaccgc 180
 gacgcaagag gcagcgatcc gtatgtcgtc ctacggcttg gcaagaagaa actgaagaca 240
 agcgtgaaga agagatccgt gaaccccata tggcaagagg agctaactct gaccgtcaca 300
 gatcccagcc aaccactgaa gctgactgtt tgctacagga ggtgttcgac aaggacacct 360
 tcagcagaga cgacccatgg g 381

<210> 3362

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-F5

<400> 3362

actcccgggt cgaccacgc gtccgcggac acttgggcgg acgctgggt cacgatgcaa 60
 aggacaccgc ggcgaaaatg actgatgca tggccgccgg tgaataactc cggctgggggt 120
 agggcggttg tgccacgtat gggttgtctc gcccgcagct tatccattcc cgactgcgca 180
 cgaacctgga cggcggcggc acgagttttt gcgcagagag gtcgccgtcg gtgagatttt 240

tctgtcgcgg tgatctgata cccaattgag ttactgtagc atggcgaagt tcagttcaga 300
 cgcctgacag agccttttga agcttagttt tctctcaatt ttgaatggct acttaaccca 360
 atatctgcat c 371

<210> 3363
 <211> 385
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-F6

<400> 3363

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 cagccagctc gcgaaaataa tgaagagccg cagcatggca tcacgcggcg cgctcttggt 120
 gctagccctc gcgctagtgg cggccaccgc cccacaggta gcggaggcaa agaagaagag 180
 agcggcggag agcggcgagg cggcggaggc gaagaagatc caggacgact tctgtcgcac 240
 gctgtgcgag ggcaagaagg ggacggacct ggtcgtgtgc aaggagtcct gcgcgctctc 300
 ccagcagtc aacctggtgc tgtaaggcag gatccagtgc aagggaagt gcaccgagca 360
 gaagggcatc acggcgcccg ccatg 385

<210> 3364
 <211> 384
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-F7

<400> 3364

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 gtaactgtga cgatgcggag cggctccatg gggccaggga ccaacaggaa caacaacagc 180
 ggaggaggag acggagcaag aaccacctcc ggctccggcg ccaccgccac cgccacagca 240
 gcggcgccac catacgaggc ggagaagcat gaggtgatca agcagtgggc acaggtcgct 300
 gacgccttca gcgcctctga agcttacaac agcaggttga ggcagacgct tgacgccaa 360
 cagctcaaga ctggaatgat gcac 384

<210> 3365
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-F8

 <400> 3365

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 tgatatccgc gcaaacaatg ctagttgccg ccgcggccgg cgccaagcgg caggcgccgg 120
 tgatgttcgt gttcggcgac tcgacgttg acgtcgggaa caacaacttc ctgtcggggg 180
 cggccgtccc cagggccaac aagccccact acggcgtcga cttccccggc ggccatccca 240
 ccggaagggt cagcaatggc gacaacacgg ctgacttcgt cgcgaagagc atgggggttg 300
 agagtagccc tccgccgtat ctgtcgcttg caccacacgg ctccagccct ctgtcgcgcg 360
 agactgctct caccactggg gtcagctacg 390

<210> 3366
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-F9

 <400> 3366

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 cgtcccgttc gttcgattcg ttctttccgc catggaggct cggaggaagc ccgcggtgtg 120
 ctgtgccctt cttgtgctgc tcacgtcgc ctccagcgca acggtgtcga ctgtcatga 180
 cgagagctgc tggaaggacg acgaccacca ccctatctgc tttcccgaag actgcgtggc 240
 gacctgccag gatcacggcc acgcggacgg ccgctgcaac tgggcatggt cgtggaggcc 300
 gtattgccag tgccgtgttg cggactgcca ataggcgcga acagctgcgt cgcattggcgt 360
 cctggctgcc tcgccggccg at 382

<210> 3367
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-G10

<400> 3367

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ctccaccccc gccgcccggc gccccacag tgccgtacct cgaccagcca tgcgcatctt 120
cctgctgtcg ggggagacta acatggccgg ccgccgagga gtacaccaca ggcactggga 180
cggagtggag cccccacaac gcgcgccgga tccgtccatc ctccgccttg cctctgcgca 240
gcactgggat gaagcccgcg agccgcccta cgccgacatc gacacacca agacctgtgg 300
catcgggccc gggatggcat tcgcccgcgc tgtgctctcg agcctgcagg aggacacccc 360
tggcgcggcg gcccagatcg ggctcgtgcc gtgcgccgtt ggcgggacgg ccatccggga 420
gtggtccctc gggaaacatc tgtacgagca 450

<210> 3368

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-G11

<400> 3368

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catgggcgcc gagttcttct cccccacca ctccccgcag ttcaaggagt tcgtgcgaag 120
cgtcgtgtgc cggcagtggg acgagggaca acgccccccc cgacaaggac cgtggcatga 180
ctgtgtcagg caataccaga tccagggagg ccaaggcggg ttgaagcttc aactcatcgc 240
cgccccgcc atgtctcagt cagctgtctc gttttatatt tgaagtgcc aaatacttgc 300
aaatttcgc tgctactaga tttagctgag aagaacgaga tgatccagg attagtggat 360
caggagtgc aaatgtggga tcccacatgc attttttctt ttgccgatgt ttcgtcgtct 420
tca 423

<210> 3369

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-G12

<400> 3369

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cttttcttgc cacggcaaaa caccttcgcc ggcgagagca tggcgatggc gtaccgtgtc 120
ctggagggtca ccctgggtgtc ggcaaatgac ctcaagaaag tgtcgctctt ctcccggact 180
cgcatctacg ccgtgggttc catctccgga ttcgacctcc gcatcccttc ccacagcacc 240
caagcagacc acagcaacgg ctgcaacccc tgctggaacg ccgtggtaca cttccccatc 300
ccgggtgccg ctgacacccg cggcctcgca ctccacgtga ggctccgcgc ccagcgtcta 360
tacctgggcg atcgcgacat cggcgaagtt gtttgggtgcc atcgacgacc tcctggccgg 420
cgccgac 427

<210> 3370

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-G2

<400> 3370

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gagaatgggg cagagattaa gtactccacg gtgcagaatt ggtactccgg tgatgaggag 120
gggagaggag gcatttataa ctttgtgaca aagaggggaa ggtgcaaagg gcggggttcg 180
aagatctcat ggacacaggt tgagacagga tctgctatta catggaagta cccaagcggt 240
gagcttgtcg gggatgacag tgttggagag ttctactcgg ttgcgcttac aaacgattgc 300
cagcatgcag acacagggac gatcatgac cacaagggga aaaattcacg cagccggatt 360
atatccaacg gcatctc 377

<210> 3371

<211> 345

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-G4

<400> 3371

tatagtgaat cgtattatga gatccatgtc cgataagtcg acggaggctg gtgtggcagt 60

actggctcca tgtgagacct ccgcacgccg ccgctgaggc atcggcagca tgcacggagt 120
 tggatgcagac ttctggcgta actgcttctg gacatgaacg gcatcctggt tcgaagcaac 180
 aacattcttt gtgcctgcaa ggtcttgaac ttggatgagaa ccactgtgag tcaaattggt 240
 tagacagggtg gatggctgta cgtccatggg agaacagggt acttgactgt aatgccaaag 300
 agagtctgcc aacgcatgaa gataaggatg acgaagcaaa ttccc 345

<210> 3372

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-G5

<400> 3372

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 cgccgcaacc gccacatcag ccatggggcg ctgcgcatcc aagccaaga cgcttgaagg 120
 gcaggcccca gctgaggccg ccgtctccac acccaatgtt gcgcccagg ccactccaat 180
 ctccgttgag gttgcggctg atgaacagg agctgagaag gtggtggtg aggagccggc 240
 tgcggcggcc gacgttgagc atcagaaggc taatgagggt ctgctccag acgcgccgt 300
 cgccgagccc gaccacaatg acgacgaagc cgtggagaag atcgtcttcg atgaggataa 360
 tccagcggca gcagcccatg cagatgaaaa tgcaccacc gccgc 405

<210> 3373

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-G6

<400> 3373

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 ccccgcggtc tccgcctgac ccctccgcac gccgccgcyg aggcacgcgc ggcagccacg 120
 gcgttgggcy ggcttctggc gtcgccgctc tcgactctgg aggccgccct gcggggcctc 180
 aacctcgcgc cccttcgcgc ccccggtggc gcggcgatgt cggcgccgt gcggtggctg 240
 ggagtgtacc gggagggtgt gctcgtcggc gtgctgctct cctggttccc caacatcccc 300

tgggaccgcc agcccttctc ggccctgcgc gacctctgcg accccttcct cgccctgtgc 360
 cgtgaagtca tgcccccggt gtteggggcg aagctcgacc tcagcccgct tgttgcata 420
 aggctattga catcatcat 439

<210> 3374
 <211> 444
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-G7

<400> 3374

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 cgccgccgac ctcgtcaccc ccaggaaggg cagcgtccgg cagcccgatga cccggggccc 120
 ggcgctgtgg atcaccttcg cgcgcgacat ggtgatcgag ctctgccagg agctcatcgt 180
 gagcagcgac aagaccatcg acggggcgcg agcgcaagtg cacatcgtgg gcgcgcagat 240
 cagcgtgcag aacgtgcgca acgtgaccc cacaacctg cagctccacg acgccgcggc 300
 gcacggcggc ggcgcgatcc gggactcgca gcaccactgg ggcgtgcgcg gggagagcga 360
 cggcgacggc gtctccgtga tgggggtccag cgatatctgg atcgnacacc tgtccatgag 420
 cagctgcgcg gacgggctgg tgga 444

<210> 3375
 <211> 347
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-G8

<400> 3375

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 tgtcttctcc ttaattataa ttattactgg ccagcccatc gccgcatgga tgcattgcacg 120
 gcgctaatta atccttcttg ctactaatta actccgggta attgggtggca caccatgtat 180
 agcgtcgtgg agttctctat attacaccat acagggaaat gtggagaccg gtgttgcatt 240
 ctatacaatt tcttcttata attatatgat tcatcggttt taaaaaaaaac aaccacagac 300
 aaaaaaagaa gcacaatacg aaaaaaaagg gcggacgctc tagagga 347

<210> 3376
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-G9

 <400> 3376

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 gccggccgcc cccacagtgc cgtaccccgga ccagccatgc gcatcttcgt gctgtccggg 120
 cagagtaaca tggccggccg cggcggcgta cagcacaggc actgggacgg cgtggtgccc 180
 ccagaatgcg cgccggatcc gtccatectc cgcctttcct cggcgcagca gtgggaggaa 240
 gcccgcgagc cgctccaagc cgacatcgac acaaccaaga cctgtggcat cgggcccggg 300
 atggcattcg cccgcgtgtg gctctcgagc ctgcaggagg acaccctgg cgcggcggcc 360
 cagatcgggc tcgtgccgtg cgcggttggt aggacggcca tccgggagtg gtccctcggg 420
 aaacatctg 429

<210> 3377
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-H1

 <400> 3377

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 tacgggctaa ctctggacat gaagatgccg cgggccgacc cttctccaag ccgggtgcca 120
 acaagtccgc ctctttctct ccaactccca tgaagccgcc gcggtgggaa tctcacccat 180
 aactccctcc aaaccactgc tttccgcaac caacctctgg cccgaacgca gccgctggca 240
 actggcatct ccatccagcg gcagatacat ttcaaggagg gaccgcgctc tcctgggtca 300
 tcaggggaca tattgaatcc ggatcatccc tgcctctgac gagagtggat tttgaatctg 360
 cagttggctc tatcacctat ccaaactctac gagctgacat tttgcattct nttgcgatgc 420
 aaacgaaa 428

<210> 3378
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-H11

 <400> 3378

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 actgacaata tgggtcagat tgtgaacctg gtagatgtcc atgacttcgt tcctgacagc 120
 gtggaaagtg tatctgagct gatggcccct ccctccccgg actccagcta cggtttccat 180
 gttccccggc agaaggagtt ctccaaggag cctcctcagc tgccgtccca gctctatctc 240
 ggcggtgctga attccccggg caccgaagaa ggctgcgcga ggccgaggca cgtcgtcctc 300
 gaccatctct acatcgagaa gggctggggc gcacagccgc tgggtggccct cggctacacc 360
 cacaggttcc gctccaagtt cgtcacctgc gtcctgtaca aaggcatcga gcggtagcct 420
 agctaaccat 430

<210> 3379
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-H3

 <400> 3379

 cacgcgtccg cagacgagtg ggcgaagatt gcgtccaata aaacggctct caacctcccc 60
 ggcaatcctc ccaacacgcc cctccggaag gccgcccctc ggggaacgcc aatgactgca 120
 aggcggggtg ttacgaggtc acggggccact ccaaattgagc atggangact gcatgaagag 180
 gtgcnaagag atcgtgctga agcagggggc tanggaccct tacaanggat acanacttga 240
 catcccatga actagttaat gtcctatat catctgccta tccatgcatg cattgcattg 300
 cgtatgcaca ctgtgcgtgc ctgccacaa agttcgacaa cacaccgatc tcgatggatt 360
 tgtaatcggg gtcactcgat cgag 384

<210> 3380
 <211> 383

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-H4

 <400> 3380

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 ttgcaccgac caaaagggca tcacggcgcc ggccatgaag gtctgccaga aggattgcga 120
 caaggcgtac gtggtgaagg cggccgaggt caccaaggcc tgcagcgtca cctgcgccaa 180
 ggagaagaac ccgcgcctca gcgagaactg caagaggtcc tgcacccctc ctcttctctg 240
 aagcgaagcc ccttgaaatg aatgaaccat gcatgcatgc atgtatgcat gcgccgggggt 300
 gacgtggcgt tcagctcaag cgctgaccga gtctatacgt acgtcgtcac cggctggcca 360
 cgcattcgat aaccacctga tat 383

<210> 3381
 <211> 386
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-030-Q1-E1-H5

 <400> 3381

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 ggctcttcc ttggccccac caagtacatg gtcattcaag gcgagcccg cgctgtcatc 120
 cgcgggaaga agggatctgg aggcataact gtgaagaaga ccggacaggc gctggtgatc 180
 ggcattctac acgagcccat gacccttga cagtgaaca tggtggttga gaggtcgggt 240
 gactacctcg tagagcaagg cctgtgaatg catccaaaca acgacaccaa cgccaacatt 300
 aattaattag tagtctccat gccctgngat tgtgcgtggc cgctccgttg aacaccatcc 360
 atcctcgggt ccgcaatttt tcccc 386

<210> 3382
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-030-Q1-E1-H6

<400> 3382

ggtcgaccca cgcgctccgag cgcccgtaga gccaccactc tcaaccgagc catatccaaa 60

gttctcaaca tcgcttcgtg cagcctgcat cggtcgacga gggctgcacg aacgatgggg 120

tccgcctccg cctcagtga gacaaccagc ctgctggcgc tggcgctggc agcgctggct 180

ttcgtctcca gggccgcggc gcagggcaac ggctgttcca gcgtgatgat gaccctggcc 240

ccgtgcatgg acttcatctc cagcaaggcg tcggagccgg ggatctcctg ctgctcggtg 300

ctggccggag tcgtgcagac cgacccccgc tgcctctgca tggactgga cggcactgcc 360

acgtccttcg gcacgccat caaccagacc aaggcgctgg agtccccgg cgtctgcaag 420

gtc 423

<210> 3383

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-H7

<400> 3383

ccacgcgtcc gggggacaca cacacacaca caccgtctcc gcccgccgc cgcgacgcgc 60

catggctatg gctcgctccg tcgcgcacct cttctttccc atcctcctta tctccaccgc 120

gcccgcctg cgggccatca ccgacgccgc cggcgccccc ggatacctcc aggaggcgtg 180

caacaagacg ctgttcccca aggtgtgcat gcacgcgctc aaggacaacc cagagtgcc 240

ggcggagacg gcggtcacgc cgcgcgggct ggccgagctg ctgctgtacg tgcggccga 300

ggtgggcatg accgtggccg cgttcgcgca ccacgagctc aacgccatca aggacgacga 360

cgctctgtac aagtgcacg acacctgctc cgaggacat 399

<210> 3384

<211> 192

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-030-Q1-E1-H9

<400> 3384

ccacgcgtcc gaaggacgt cacacctttt tcctctgaca tctacaaggg gggaaggga 60

aacacgtaca ttcacccggc tgcattaatg gcctcgggtc cggctccggc gactaccatc 120
gccgccgtca tcctatgcct atgcgtcgtc ctctcctgtg ccgcggtga cgactcgaac 180
ctcgccgact ac 192

<210> 3385
<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-A1

<400> 3385

agtaccggtc aggaattccc gggccgaccc acgcgtcagc ccacgcgtcc gcccatgcgt 60
ccggaccctc cgtcgactga cccatctctc tagttataat ttttctctcg tccttgcat 120
gcatattagt tgctatccat tggtaacgca caacagtaaa acgacaaaca tccaacagct 180
atattatgtt cgacggtgta acaccctgaa ttttagggta taaaatttct tctctaaatg 240
caaaccaa at tcaagtgtta cctcttgtct ctctctctat cttttccttt tgattaaaag 300
taagtgaatt aggcgagggg ttaattat t aatttgtcaa aacttatgtg agtcatgaaa 360
tgttgtatca tgctga 376

<210> 3386
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-A11

<400> 3386

caagcgtcca cccatggaat gccggggcgt ggaaaccgc ccacgcgacc atctagagcg 60
ggcgggacgg gtccggcacc acggcgggcg cgtgcgggta caaggacacg cgcgcgcggg 120
ggtatggcgt gcagacagtg gacgtgagca cgggtgctgtt cggcgacggc gcggcctgcg 180
gcgggtgcta cgaggtgcgc tgcgtggaca gcccagcgg gtgcaagccc agcgcggagg 240
cgctggtgtg cgacggcgac cgacctgtgc ccgccaacg accagcagtc cgcggaacgc 300
ggcgggtggt gcaaccgcgc gcgggagcac ttcgacctca gcatgcccg 349

<210> 3387

<211> 343
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-031-Q1-E1-A2

 <400> 3387

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 ggtgaaagct agcagaagag gtacctaact ctaccctact atagagaaaa agtcagcaca 120
 ttgcaagcaa taataatgga gacgacgacg aagctccggg ggagccggcc cggctccttc 180
 ctctctgctg ccgcggcggt cctggcgctc gccgccgcgt cgggcgtcaa cgtcggccag 240
 ttcgacgacc acttgacgaa gcggaaggag ctgcgcgagg cgtcggcgaa ggaagcgtac 300
 angcccgacc cgtacaacgt caccaacagc ttcaacgccg ccg 343

<210> 3388
 <211> 184
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-031-Q1-E1-A3

 <400> 3388

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 tcaacgacga cgcagtagta catatggaga aggcggcggg cgtgagcgcg gcgaggctgg 120
 ccgtggcggc ngcngcggtg ctgctgtgcc tgctgctgct gctggcggcg gggccgcacg 180
 gggt 184

<210> 3389
 <211> 356
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-A6

 <400> 3389

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 acatgataga caacatcgac ggccgtcggg taaccaagaa caaggcgcg atccaagttg 120

gcgactcctc ttcgtcggac gaaagcgaca gggagaagga ggaagatgaa gaagaagcac 180
atgaggaagt ggccaaggcg ccccggttgg gttggaatca tcacaatcac cacgaagcgg 240
ccggcggcac tggcaacaac agcaacagga ggcggcttct gtcgaagcag ctgtccatga 300
aggagaccac cagggagatc aaatgggaga agcgccggcg gcagatactg cggcgc 356

<210> 3390

<211> 290

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-A7

<400> 3390

aattccccggg ccgacccacg cgtcagctgc cacttcacaa acaacaacga actcatgctc 60
ctccgcgcca gcgactcctg gccgcaagac cagatcatgc agatcacctg cgccttcaac 120
cacttcggca ggggcctggt gcagcggatg ccaaggtgcc gctggggctt cttccacgtt 180
gtcaacaacg actacacgca ctggctcatg tacgccattg gcggcggcga cgcgccaacc 240
atcatcagcc agggcaaccg ctacatagca ccaccaacaa tcgccgcca 290

<210> 3391

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-A8

<400> 3391

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ttccgtctct tgtccctgtc gtctctgccc ggtttccccg gtttttgaga ggggaaagag 120
gaggcggagg agaggggatg ggagggacga gaggttcccc gtgtgggagg ccgcgctcgg 180
cgccggagtc gccgcgcct tcgccgctgg actcgtcggg gtctaccttt ccatgccgga 240
ctccgactac agcttctctca agttgccacg taatctcgag gaactccaaa tcttactg 300
ccaccttgac aactatacta gtgactacac cctacatgtg ttggtagggtt att 353

<210> 3392

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-A9

<400> 3392

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ccctgcaagt cctccatcat catccgtctc gacggcaacc tgctcggcac eggcgaccgc 120

agcgcgtacc aaaggaactg gatcgagatc gagaacgtcg agaacctgtc catcaacggc 180

cacggcacca tcgacgggca gggagccctg gtgtggagca agaaccagtg ccagcattct 240

tacaattgca agatcctccc gaatagcttg gtgctggatt ttgtgacgaa cgtccagatc 300

cgcgccatca cgctgctcaa cagcaagttc ttccacctca acatcttcga gtgcaagaac 360

gtgctgatcg aca 373

<210> 3393

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-B11

<400> 3393

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gatccctctg tacctggggc gccctggaa ggagttctcg cgctcgtca tcatggagag 120

caccatcgcc gacttcgtcg agccagaggg gtacatgccc tggaacggcg acttcgccct 180

caagacgtc tactacgccg agtacaacaa ccgcggggccc ggcgccggca ccagcaagag 240

ggtcaactgg cccggcttcc acgtcatcgg acggaaggag gccgagccgt tcaccgccgg 300

gccgttcac gacggcgcca tgtggctcaa gtacaccggc gcgccgcaca tacttggggt 360

caagttctaa aggccgcgtg gcatggcata catcacatca tatatagtga 410

<210> 3394

<211> 274

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-B4

<400> 3394

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 aaataaaaaa aaaaaaaaaag gatggccgtt ctaaaggaat aaaacattaa ataagcgtgg 120
 atggcagggc agatcgattc taacttaaaa aaaaatttga attcattggc cttcgtttta 180
 aaccgtaatt acagtcaaat gcctgtcggt attcaactta atccctttga aaaacatccc 240
 gttttcaata taaggcgcgt tgctgaaaat gccc 274

<210> 3395
 <211> 348
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-B5

 <400> 3395

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 gtgagggaca ccacgtcaaa ggataccaat ggccacaaga tggctctgcg cggctacctg 120
 cccgtgccgc ccccttttgt acgcgccgcg gacaccgcaa gcgataaatc cgctacgctc 180
 gactttttct catcagcacc ggcagcatct gtaaccgcac gggccaaggg cgaccggcgc 240
 aggcacgcgt acatctccgc caatctcag tcgcgccggg gcagcaggca tacggttgcc 300
 actgaattag agtcatcatc cgcgatctcc gttcctatct catcgggg 348

<210> 3396
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-B6

 <400> 3396

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 gcgggagtag acgcagtaca gcgagtacaa gaactgggtg tggaagtcgc aggacgacct 120
 gttcctcaac ggcgccttct gcaaccagtc cggcgccag aacgagcgca agtacgacag 180
 gctcgacctc atccaggcca agggcgcca gtacgccgag tcgctcacca ggtacgccgg 240
 cgcgctcaac tgccgcgtcg gcaggaagtg ctagtgcggtg tgcagctcta ggctgcagct 300
 ttcacattg gcgatcgatc gtaacaatgc aaggttgtgt tgtatataac tcttgtgttt 360

<210> 3397
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-031-Q1-E1-B7

 <400> 3397

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 cacacaaata ataaggaaag gtcccgccct tttcctccga catccacagg ggggagggga 120
 aaacacgtgc atgcacccgg cggaataat ggcctcagtt ccggctccgg cgacgacgac 180
 cgccgccgta atcctatgcc tatgcgtcgt cctctcctgt gccgcggctg acgaccccaa 240
 cctccccgac tacgtcatcc agggccgcgt gtactgcgac acctgccgcg ccgggttcgt 300
 gaccaacgtc accgagtaca tcgcggggcg caaggtgagg ctggagtgca ngcacttcgg 360
 caccggcaag ct 372

<210> 3398
 <211> 369
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-B8

 <400> 3398

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 caagtacccc ctctgcatcc gctttgctac caagtctggc ggctaccgta tcgccgatga 120
 tgtcatcccc gccgatttca aggetggcac cacctacaag accactctca gcatctaata 180
 agcctctgat aagtgatgac gaataatatt tcgaaagagc tcacttagtc cactgcca 240
 cgagccaata tttaaatatt ttctatggtt attttggtgc acaacacat ctcttctgt 300
 gccttggtgt gttgggtgat ttattacat gaattgaaat acactgctta ttaagattc 360
 ttttgggtg 369

<210> 3399
 <211> 394

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-C11

 <400> 3399

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 gacgaccgcc gcgggcatgc tgcgcgtctt cttccacgac tgcttcgtca ccgggtgcga 120
 cgcgtcgggtg cggatcgcgt ccacccagtt ccagaagtcg gagcacgacg cggagatcaa 180
 ccactcgttc cccggggacg ccttcgacgc cgtgggtgcgc gccaaagctgg ccctggagct 240
 ggagtgcccc ggggtggtgt cctgcgccga catcctcgcg ctggcgtcgg ggggtgctggt 300
 caccatgacc ggggggcccc ggtacccgat tccgctgggg cgcaaggact cgctgtcgtc 360
 gtcgcccaca gcgcccgacg tccagctgcc gcac 394

<210> 3400
 <211> 86
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-C2

 <400> 3400

 cgcgtcaaaa aaaaaacaaa aaaattaaaa taaaaaaaaa aaaaaggac ccaaaccaaa 60
 aaaaaaaggg cggacgctct agagga 86

<210> 3401
 <211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-C5

 <400> 3401

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 taagcccctc ctctcctcgc ccctggcgtc cgcgtcctt ggtgcggcgc cggccgccgc 120
 gaacgcgccc ggcgggggggt tcagcaactg ggtggcgatg aaccagcaga gctacgcgt 180
 gtacgcgcag aagtccgtcg gggacggggg caaggagccc ctggacaaga agctgtcggg 240
 ggcggagaag aagaaggtca cgtacgtggt ggaccccgag ggcaaggcg actacaccaa 300

catcaccgcg gcgctggagg atatcccggt gagcaacacc aagcgcggtga tcctggatct 360
 caagccccggg gctc 374

<210> 3402
 <211> 344
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-C6

<400> 3402

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 gaggtaccta actctaccct actatagaga aaaagtcagc acattgcaag cagtaatggt 120
 ggagacgacg acgaagctcc ggtggagccg gcccggtcc ttctctctcg tcgccgcggc 180
 gttcctggcg tccgcgcgcg cgtcgggct caacgtcggc cagttcgacg accacttgca 240
 gaagcggaag gagctcgccg aggcgtcggc gagggaggcg tacaggcccc acccgtaaa 300
 cgtcaccaac agcttcaacg ccgcggtcca cagagctgtc agca 344

<210> 3403
 <211> 348
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-C5

<400> 3403

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 agcacgagcg ctgcccgtc gctgaaccat ggccgggtcc gcggtggccg tcgtcctcct 120
 gtccggcgtc gcgctgtctt gctgtacaa cctccttttc gtctccctgt ccgtctcgga 180
 cccggcagca gcaccagccg tccccgcgcg cgcgggtggc caccatggca gcaacgttcc 240
 gtccgggtca ggaaccgcca acgtcgtcct ccgcttcggc ctgtccgggc agccgctcgg 300
 cttcaagaac cccgcttccg ccgcgggcct cccggagatc gacacctt 348

<210> 3404
 <211> 433
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-C6

<400> 3404

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cggccgctaa gagatgtaga aagtgaaga agttcctccg cagcgcgggc gcgtgctgct 120

gctcgccgctc ggcctcctcc gcccctgctg gtgggtgtgcg cggcaacgaa gaggcgtcga 180

cgtcggcgct ggcttccgcg ccagatggca agaaaaagaa gaggtggagg aagagaaagt 240

tctggagaaa gaagaagaag gccaaagaagg agagcgacga tggcagcggc gagctcgtgg 300

atctcgtaaa cagcttctcg gccaaagtccg acgtgtgcaa gaacgtgaat gcggccgacg 360

agatcctacg gggetgcaac cagaacatgc ccagcagggc gctgacgttc agccagctgg 420

gcgcccgcgac cga 433

<210> 3405

<211> 434

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-C8

<400> 3405

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tttgtaaagg ccgacaatgc aattgcggat tcccattctc ttgaccggaa ttctgggacc 120

acagcattga cggtccttat atttggcagg aactgcttg ttgcgaatgc cggtgactgt 180

cgagctgtat taggaaagcg aggcagagct gttgaactct ctagagacca caaaccagc 240

tgcatagttg aaaggctcag aatcgaaaac ctgggtggta ccgtctttga tggctacctc 300

aacggtcagc tggctgtagc aagggaatc ggtgattggc acatgaaagg ctccaagggc 360

tctgtatgcc ctcttacacc agaacctgag tttagggagg ttaggcttac tgangaaaat 420

gagttcttga taat 434

<210> 3406

<211> 447

<212> DNA

<213> Zea mays

CGCGGGGTAGA CCCACGCGTC CAGTCACGCT GTGACGTCGA CGCGCGCCTT GGTGACGCCG 60

<223> Clone ID: LIB148-018-Q1-E1-D1

<400> 3406

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CCGAGGCCCT TGGCGAAGAC CTCGGCGATG AACATCCGCG CGTAGCCGTG GATCCGCCTC 180
GTCACGGGGCC ACACGCACAC CACCGGGTTG TCGGGCCTGG GCGTCACCGT GTTCTCCACC 240
CGGTACAAGA ACCCGCGGCC CGCCACCGGC GGCTGCTGCC CCAGGAACCT GAGGTTGCTC 300
TCGAACCTGG TCTCCGGCAG GTCCGTGTCG ATCCAGTTGT CCCTGAGGTA CCCGGCGCTC 360
CACAGGGGCT CCCCAGGGCCC GGGCGCCGGC GACCTGCGCG GCTTCCACAC GCAGATGACC 420
CGGCGCGGGA GCAGCTCCGC GACGGTC 447

<210> 3407

<211> 248

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-D12

<400> 3407

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TAATAACGGA TGCTACTACG TACCGTACGG ATAATGGGTA CGTAGCTACA TGAAGCTGTC 120
TACGGATAAT GCCGTCCGTT TACTCCTCTC ACATGTTTAA AATTTTAGTT TCGTTTCTTT 180
CGATTTTCGAA CGCTGTTGCA TATTCCCGA CCAATAATA AAGAACC CGA CAGACAATGC 240
AACAACCT 248

<210> 3408

<211> 451

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-D2

<400> 3408

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cgtgcagcca cagacaggcg tccgggcacc atgtctttca ccggcacgca ggacaagtgc 120
acggcgtgcy acaagaccgt ccacttcacg gacctcctca cggccgacgg cgccatctac 180
cataagacat gcttcaagtg cagccactgc aaaggggtcc tctcgatgtg cagctactcc 240
tccatggacg gtgtgctgta ctgcaagacc cacttcgagc agctcttcaa ggagaccggg 300
agcttctcca agaacttcac gccagggtggc aagtcacag acaaggggtga actgacaagg 360
gccccaaagca agctgtcgtc tgcattttct ggtaccacgg ataagtgcgc agcatgccag 420
aaaacagtgt acccgctgga gaagttaact c 451

<210> 3409

<211> 248

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-D3

<400> 3409

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cagcagcaag ctaattaana ggggtgtttg tttctagga ctaatgttta atcccttcaa 120
tttaatcttt ttcagcatat aaattgctac atacataaac tataccttat tttagtttct 180
acatttaata attttctcac tatattctac tacactttca tgactaatta ttactcccta 240
aaaaccaa 248

<210> 3410

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-D5

<400> 3410

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gaaggaaaga aaactccaaa tggaaaaaca ggagccaaga agtaagcaac tcagttgaaa 120
cttcgttttg ttgggaccaa cttcaccatg gccggggaca gataaacatg ttgatcctat 180
ctactgggtg atacattggt gttttgacac acggatatgt cagtcctatt ggttgagaga 240
gcatgctgga tcttcggcca tatgctgtaa atcgcttggt aatttttggt ctactagtac 300

acgaagaaat caaggaaaaa aaaccttgac tacgggaaga aaatcacggc cacaggggta 360
 ttttaacctc cttcctaatacg cgcataatc tatcgaagtt gagg 404

<210> 3411
 <211> 379
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-D7

<400> 3411

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 agaaggagaa gccatcagca gtccatgcag aggaaaatat tgccaccaac aaggtggcag 120
 ccgagcccac gacagaattg aagaaagaca ccgaggagga gatatagatg gagaaggaga 180
 agccatcgct aagctaattg actgcatgtc aattggctga tgccatgatga tcaatgtgca 240
 agaaagagat cgaccactaa ttggcataca tgtttaagtc gggagagaga ctcggtcacc 300
 ttgtaaaciaa aacaaacctt tgatgtctcc cgttttccct ccatgggggt ctgataatac 360
 aacatcctgg ggcttattg 379

<210> 3412
 <211> 452
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-D8

<400> 3412

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 ctgcgtcccc ctgcaggtc ttttggtttt tttagttcct ccctttgctt cttggagggtg 180
 tttgttgccg tctcaccgc agttcttgag acatgcagag ccagatagtg tgccacgggt 240
 gcaggaccct tctgttctac ccaagagggt ctccgagcgt gtgttggtgc gtatgccatg 300
 tggtcaccaa tgtgccgcct ccagcaatgg agatggctcg acttagatgt ggtggctgcc 360
 agacattatt gatgtatgct cgcagtcaa caactgtaag atgctcatgt tgtgacacag 420
 tcaatcttgt cagaccagtt agtagcatag ct 452

<210> 3413
 <211> 415
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-D9

<400> 3413

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gatgactcgt ctgtgctcgc ggcgttcaag aagttcgcca gggtcaggag ggtgctcaac 120
atcgaggcca agatcagcgg cgcctccaaa ccgtcgggtg atgacatcaa gaagtacgcg 180
gacacggtga gggtaaccg gaactccgtg gcgcagatca atggctactt cctgacgcac 240
ttcaccgaca cggtcagcaa cctacaggac gccaacatca ccgtgtttgt cggcgtactc 300
aagaacgagt tcatgaacct cggcttcgac tacttcgctg acccgacggt cgagatcgct 360
acctacacgt tggcagtgtt ggctgatggg ctggtcacgg acaaacctgg cactg 415
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<210> 3414
 <211> 418
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-E10

<400> 3414

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gacgacttct tcgtccctct cttcattagc acgctaactt gtaatctgca ggatctaagc 120
aaagacttga tttagttatg gacggattgg taggcctctt gaaagttcgc gtgggtccggg 180
gtatcaacct tgccaccgc gacgcaagag gcagcgatcc gtatgtcgtc ctacggcttg 240
gcaagaagaa actgaagaca agcgtgaaga agagatccgt gaaccccata tggcaagagg 300
agctaactct gaccgtcaca gatcccagcc aaccactgaa gctggagggtg ttcgacaagg 360
acaccttcag cagagacgac cccatggggag acgcggangt ggacgtggcg ccaactgat 418
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<210> 3415
 <211> 239

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-E12

<400> 3415

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 ctgagcaagc tgcagcaaca cctcggcacc tgacctggcc atgcatgcac acgtatacta 120
 taatctaaca acgtagctga cctgggcaaa ttgccagcct gacaggggcc aggggtgctcg 180
 aatgtctcac tctcaccgcc gactaacttt ccatcaaaat tgattcttgt tcataactca 239

<210> 3416
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-E2

<400> 3416

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 ccgccacatc tattaggtgc agccatgggt gcctgtgcaa cgaagcctaa gacgcttgag 120
 gggaaagccc cagctgaggc caccatctcc acaccaagg ttgcacctga gaccactacc 180
 atccacattg aggttgccgc aaaacatgca gtagttgaga aggtggagga ggacaaggag 240
 gaggcactaa cagtggcggc gaaacaagag ccagcagcca ccattgagcc tcagcagatt 300
 gctagtgagg tgaccacttc ggaagtggcg gtcgtcgttg tcgagcctga gaacaaagag 360
 gaggaggaag ttgtggagaa gaccgtcatc gagaaggaga agccatcagc agtccatgc 419

<210> 3417
 <211> 324
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-E3

<400> 3417

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 agcgccacat ctagtaggtg cagccatggg tgcctgtgca acgaagccta acactcttga 120
 ggggaaagcc ccagctgacg ccaccatctc catacccagt gttgcacccc agaccgctac 180

catccacatt gaggttgccg caaacacatc cagtaggtgt gaaggtcgcg gagtgaccgc 240
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 acattgcgag tgaggtgacc actt 324

<210> 3418
 <211> 435
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-018-Q1-E1-E4
 <400> 3418

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 gcgacggcga cggcgtctcc gtgctgtcgt ccagcaacgt gtggatcgac cacgtgtcca 180
 tgtccagctg ctccgacggg ctgatcgacg tggatgaacgg gtcgacggcc atcaccgtgt 240
 ccaacagcca cttcaccgac cagcaccagc tgatgctgtt cggcgccagc aacgacagcc 300
 cgcaggacgc ggtgatgcag gtcacgggtg cgttcaacca cttcgccgc gggctgggtgc 360
 agcggatgcc gcgctgccgc tacggcttct tccacgtggt gaacaacgac tacacgcact 420
 ggatcatgta cgcca 435

<210> 3419
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-018-Q1-E1-E5
 <400> 3419

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 gtcattgttt ggcagaattc ctccaaagtc aatcactgac aaggagatgc ataaacgcca 120
 agacatgctt tccagtttga agtctaaagc caagcagatg gcgacaagtt tcaacatgct 180
 aaacttcgct aacagggagg atctgcttgg tcaaagtaaa atgccagatg acatgagcag 240
 agttgctggg ttagataacc aaggaattgt tggccttcag aggcaaatta tgaaagagca 300
 agatgaggggt ctcgagaagc tggaagagac agtgctgagc acgaagcata ttgcattagc 360

agtcaatgaa gaacttaccc tgcacacaag attgatagat gaccttgaag atcatgttga 420
tgttacaaat tc 432

<210> 3420
<211> 131
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-E6

<400> 3420

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caaattctgg atggatgctc cgttgaactg aaaccttttg ctgtaaaaaa gttctctggg 120
ggttggagtg c 131

<210> 3421
<211> 220
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-E7

<400> 3421

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cccttttttag ttctaaact accaaacatg ccctaagatc acgtgcaagt atttttagcaa 120
tccccttaac cccttccttt tcttttctct ctgatcttcc tctgatgcag aggttgaaga 180
tacaaatttg tcaggaggtt ctcagacctt cttttgtgtt 220

<210> 3422
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-E8

<400> 3422

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gcaggcagga agggcaggca ggacaggaa gccgtaccgc gtcgagctcg tcggcatcat 180

ctgcgacgcc tacctcgccg tcgtcagggg catcatgcga gctatcatat ccgggagagc 240
 cgtgcgggtg aactcgcagc tcaagtcgca caagcgcttc gccggcgcggt tccgcaagta 300
 ctgcgacctc gtggacaacg ccaggctcta cagcaccaat accatcgccg gcgcaaagct 360
 gatcgggttg aaggacaatg acaaccggct actggtggac g 401

<210> 3423
 <211> 240
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-E9

<400> 3423

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 aaggacctcg ccgaggaacg ggccggcggtg ctccgcgccca gcagcaaggt ctccgacgcg 120
 gcgttcgggg tgccgccgct ggctcctggt gtcgagaccg ccaacagcaa cggtgcccgc 180
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<210> 3424
 <211> 309
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-F1

<400> 3424

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 actggcttgc ctggtctgat gatgaccttc cttttgcatg catgcatggt atctcact 120
 tgatgatgat ctagctcact agttcttttt aatttcgct tcattcgctt ttccaaattc 180
 gattgtgttt cagccaagtt gtttagcggg acatctcttg tctgatcttc ctgctaaata 240
 gagttggact cctatatata gaggccttcc ggcacatata atatacgtcg gaccaatatt 300
 attgtgatc 309

<210> 3425
 <211> 491
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-F10

<400> 3425

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gtccaccatg gcgcagcgag cgggtggccac gatgacgact aataagcccc tectectect 120

cgccctggcg tccgcgctcc ttggtgcggc gccggccgcc gcgaacgcgc cgggcggggc 180

gttcagcaac tgggtggcga tgaaccagca gagctacgcg ctgtacgcgc agaagtcctg 240

cggggacggg ggcaatgagc ccctggacaa gaagctgtcg gaggcggaga agaagaaggt 300

cacgtacgtg gtggacccca tcggcacggg cgactacacc aacatcacgc cggggctgga 360

ggatatcccg gtgagcaaca ccaaacgcgt gatcctggat ctcaaggccg gcgctcattt 420

ccgcgagaag ctgttctga acatcagcaa gccgttcaac acgtgccggg tcggctccaa 480

gaaagccgcc g 491

<210> 3426

<211> 202

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-F11

<400> 3426

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ggcgtgggtc tacgcgcctc acggaatata tgtgggcgat gataaggtga tccatttcac 120

aagaggaaga cgacaggagg tcngaacagg aactgtcttc gatattattc ttgtgagttc 180

cacccccaaa cgaagcaaca cg 202

<210> 3427

<211> 498

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-F12

<400> 3427

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 caaaatctca gatccttcct gcccgccgcg ccgtgcccggt cgacgcgtcg ttcttgccgg 180
 ccgcgccccca cctccgcctt ctctcctcc agggggatcg gatacgccac aggctgcgcg 240
 atggtgctgt ggggtcttcgg ctacggctcc ctcatctgga accccggctt cgacttcgac 300
 gacaaaatcc tcgggttcat caagggctac aagcgcacct ttaatctcgc ttgcattgac 360
 cacagaggca caccggagca tccggcgagg acctgcacgc ttgaaaccga cgaagaggcc 420
 atatgctggg gaattgcata ttgtgtcaag ggtggtccag aaaaagagct aaaagcaatg 480
 cagtacttgg agagaaga 498

<210> 3428
 <211> 361
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-018-Q1-E1-F5
 <400> 3428

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 ggggtggtgaa taattgaaga agaagaagag gcggagactt gagcagggtga tgtcttcgct 120
 gccaggaggc ttctgtgctg tgccgcgtcct gcgcgggatc gacctcgta gctgcgacgc 180
 caagggcagc gaccctacg tcgtgctcag cctggatgga cagaaactga tgacgagcgt 240
 gatgaagaag acggtgaacc cgttgtggaa cgaggacctc accttgccg tcatggacgc 300
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<210> 3429
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 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-018-Q1-E1-F7
 <400> 3429

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 gcattggtgc ctctttcctc tttcaccaag gattccggtg ccttatttca caagacaaaa 180
 aaagtctcaa gggctcttgat tcttgatga actcaagatt tatggtggat cttggagctg 240
 tgggatgcta agcctgggtc agctactaga ttatgaactc tctgctgac taatagcatt 300
 tctacaagaa ttcttttgct ggaagggtta ttagttattt gcaacaatga aggaacatct 360
 aatgcttaat attgatgacc taagcattct tgagcctaac gaggtcattg ggacagtcaa 420
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<210> 3430

<211> 440

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-F8

<400> 3430

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 gtggagttgc cataactcgtg ccgtgctggg gcttgctcca cctgtgccgg caaaatcgag 180
 tctggttcgg ttgaccagtc ggatgggtcc ttccttgatg acgggcagca ggaggaaggt 240
 tatgtgctga catgctctc ctacccaaag tccgactgcy tcatccacac ccacaaggaa 300
 ggcgacctgt actanggcta gggctttcca atttggcgag ggacaaaaaa tgctctcgag 360
 tgggtgtgtg tcaagcaaag ctctccatc tgcgcctac cccgttgtgc gaactgtttg 420
 gcatcaaact tgtgtgggtg 440

<210> 3431

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-F9

<400> 3431

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cgtacccgctc cacgatcctg ggccgcgagc gcgccatcgt cgtcaacctg gagcgcgtca 180
 aagccctgat cacagccaca gaggtgctgc ttccaaacac caaggatccc gcctttgcgc 240
 gcttcgtccg cgacctccag acccgtgtcc tcgcatcttc gtctgacgag gcagctgagt 300
 tcaactgacat ggaacgtgaa tcactaatag ttgcttcacc atttccccta ccaagtgcag 360
 ccagaggaca tgaaatggag atgactaaga agactactgc tgttgtgcct gagatgacta 420
 gtagcagcag tatgcccaat ttagctattg caaaagat 458

<210> 3432
 <211> 223
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-G1

<400> 3432
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 cctggtagca ccatgacacg atggcccgtt cgtattttct ggcttgctcg tacttttcag 120
 ttccatgggt ttacaacacc ttttactccc agcagaaaat acataatatg catgtactcg 180
 actttttttc tatagtaata taaacaaagt ttcacatgtg ttt 223

<210> 3433
 <211> 85
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-018-Q1-E1-G10

<400> 3433
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 gctcccggta aaaaatgact cgaag 85

<210> 3434
 <211> 71
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-018-Q1-E1-G11

<400> 3434

accacgcgt catgccaagc gtcccggtcc tgggtttttc ccaactttga aaaaaggcgg 60

ggttccccca a 71

<210> 3435

<211> 94

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-G12

<400> 3435

cgtcagccca cacgtccgcg acaagatggc gtgcacaaac aatgcgatga gagccttggt 60

cctcctggtc ctcttctgca tcgtgcatgg tgag 94

<210> 3436

<211> 291

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-G2

<400> 3436

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ctaataaaac tctcacgcc gccatccgag agaacaagcc aaccgacccc gtccccaagg 120

caatccgtcg ccgacgtacc accgccaccg caggagcgag atggagatga agaggatcct 180

cttcgccgtc ctgctcgtea tcgccgctc ggccaccgca gtgctggcct ccaccgatgc 240

cgccgccgcg ggcgccccaa ctgcctccga gtcgtccgcc gagggctccg c 291

<210> 3437

<211> 460

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-G3

<400> 3437

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cctcttgag aaacgaggaa agaaaacatg tcttctcgct gggttagggc ggaggtgtac 120

ccgctgttcg cgacgacagg ggtggcggtg gggatctgcg tgatgcagct ggtgcgcaac 180
atcaccacca acccgagggt gcgggtgacc aaggagaagc gggcggccgg ggtgctggac 240
aaccacgacg aggggcgggc ctactcgag cagggcgtgc gcaggttctg gctctccaag 300
cgccgcgact acatgcaggc catggacaag gtgccacgg accctaataa gtagacgacg 360
acgatatacc ccaatgcatg gcaagaagat atatatatca gcacaacgca actgcatgcg 420
atgctgcttg ttgctgcaat taatccacta tactatatac 460

<210> 3438
<211> 412
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-018-Q1-E1-G4

<400> 3438

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cgtctccaac ggccacttca cgaggcacga ccacgttatg ctgttcgggg ccagcgacgc 120
cgcgccaag gacagggaga tgcaggtcac cgtcgcttc aaccacttcg gcaaggggct 180
ggtgcagcgg atgccgcgct gccgtcacgg cttcttcac gtggtgaaca acgactacac 240
gactggctc atgtacgcca tcggcggcag ccggaacccc accatcatca gccagggcaa 300
ccgcttccgc gccgtcgacg acagcagggt caaggaggtg accaagcggg agtacacgca 360
gtacagcgag tacaagaact ggggtgtgaa gtcgcaggac gacctgttcc tc 412

<210> 3439
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-G5

<400> 3439

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gcttccgctg ccctgaggtc ctcttcacgc catccttcat tgggatggaa gctgctggta 120
tccacgagac cacctacaac tccatcatga agtgcgacgt ggatattagg aaggatctgt 180

atggcaacat cgtcctctcc ggtggtacca ctatgttccc tggcattgct gacaggatga 240
gcaaggaaat caccgccctg gctcctagca gcatgaagat caagggtggtt gtcctccag 300
aaaggaagta cagtgtctgg attggaggat ccacctggc atcgctcagc accttccagc 360
agatgtggat tgccaaggct gagtacgacg agtctggccc gtccatcgtg cacaggaaat 420
gcttct 426

<210> 3440
<211> 277
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-G6

<400> 3440

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gtcgctgctg tagctgtggt cgccgttgtc gcaaacgtca gtcacaccaa gcctctgact 120
cctgacgggc gcatggtaca ctacatccac agcaacttca tggacggggc gtgggatccc 180
tctcacacga tcttctactg cggtcgggac aggtcctgca ccacggattg ctcatacggg 240
taccatggca ctcacgcgca tgggtacgag ctgcata 277

<210> 3441
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-G7

<400> 3441

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caatcagcta aatgctaacg gaaccttgcc tttccaaaac tggacaaatc tttatcaaaa 120
tcttgggtcg actccagcag cagcacagaa tggtgccacc aagggttgcta acaacaatca 180
ggacttctct tctggtacct tcggttttgg cacacctggg gtgtacaaca ttagcccagc 240
tgtcccagca aatggggcca cgacagcagg tgctatcaac aacggcactg catcaactgc 300
ctcttctact ctcccctcac aatctggcaa agactatgat ttttcgctgt taactcaagg 360
atttttcacc aaacgatgag cgcctagtga gcttgaaaac caagcagacc acaggatcat 420

CCAGGAAAT CACCGCCCTG GCTCCTAGCA GCATGAAGAT CAAGGTGGTT GTCCTCCAG

<210> 3442
 <211> 445
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-G8

 <400> 3442

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tacgggcttc gtttgaggct ggagtcctga ttggcaggtg caagcacaga gctcgatcgc 180
catgtctttc accggcacgc aggacaagtg caaagcctgc gacaagacgg tccacatcat 240
cgacctctc accgccgacg gcgtctcgta ccacaagaca tgcttcaagt gcagccactg 300
caagggcgtc ctctcgatta gcagctactc ttccatggac ggcgtcctgt actgcaagac 360
gcactttgaa cagctcttca aggagacagg gaccttctca aagaactttc aaggtggagc 420
atcttcaaac aagaacgacc aagca 445
  
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<210> 3443
 <211> 452
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-H1

 <400> 3443

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agcccagcca gggccagtc tgatcatgat gcagcgagct aggattgccg tatgtgctgc 180
tcgggggtctc gagttcctcc acgagaaggc cgatcctcga gtgggtccacc gcgacatcaa 240
gtcaagcaac atactgctct ttgaccatga tgttgcgaag atcggggact tcgacatctc 300
aaaccaggcc cctgacatgg ctgcgcgct ccactctact cgcgttcttg gcacctttgg 360
ctaccatgca ccagaatatg ccatgactgg acagcttagc acgaagagtg atgtctacag 420
ctttggagtt gtgctgctgg agcttttaac cg 452
  
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<210> 3444
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-H3

 <400> 3444

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tgcccgggta cgatgtcctc gacgtgctcg cggcgctgag cctcagctcc cccagggcca  120
tccgccagcc tcgctaggag aagcctgctc atggcgctg gcggggccacc acctccacca  180
cggctgctgt gcctagtgtg accccaagca aggctagtct gtttctgtgt atacaatacg  240
actgaaaaac taggagaggg gggattcggc caaggcggcc ggtgctctct cctctcctcg  300
tagctagttt ttctctctgt tccagctcag ttcttgttca tccagccgtg ttaggaaaaac  360
aaacccagcc ccgtgcccac gttgttgaaa aatatattag tctggttat                    409
  
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<210> 3445
 <211> 453
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-H4

 <400> 3445

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accgcacaga ttcagaatct ctgaaagctg atagcactca aactcgagat gctgggtcaa  120
ctgcctcaac agctattatt gtaggtgatc gtttgcttgt tgcaaatgtt ggagattcta  180
gagctgttat ttctaaagga ggacaggcga ttgcggtttc aagggatcac aaacctgatc  240
agacagatga gaggcaaaga attgaggatg cagggggcctt tgttatgtgg gctgggacat  300
ggagagtggg tggcgcttct cgtgtctctc gagcatttgg tgataaactc ttgaagccgt  360
atgttggtgc tgacctgaa atcaaggang aggtgggtcga cagctccctc gaatttctca  420
tccttgctag cgacggactc tgggatgttg tca                                453
  
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<210> 3446

<211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-H5

 <400> 3446

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 cttgtgcagg tttcagctgt ctcaagattg aagcatgaga atgttgcca actcgtcgga 180
 tactgcgccg aagggagcac ccgcgtcctt gcttatgagt atgcaactag gggatcattg 240
 catgatatcc tccatggtaa aaaggggtgc aaaggagccc agccagggcc agtcctgtca 300
 tggatgcagc gagctaggat tgccgtatgt gctgctcggg gtctcgagtt cctccacgag 360
 aaggccgata ctcgagtggg ccaccgcgac atcaagtcaa gcaacatact gctctttgac 420
 catgatgttg cgaag 435

<210> 3447
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-018-Q1-E1-H6

 <400> 3447

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 gtttggaacta ctcccttggg ggccactcta ggcattgtct tcacaattcc aatagcaatg 180
 gttgctgata tgatcattca cggccgtcac tattcagcag tatatattct tggttctgtc 240
 caggatattt caggctttgt tatecggaac cttgcagatc gcttttctcg ttctctaggg 300
 ctatcatagt ctcataaaac agaacaggcc cttattagag cgtgcatcag gaagctccaa 360
 ggtcgggttg gttaggccaa tacttcagaa aacctggatc gggagatacc aggaattaat 420
 ttccctttg 429

<210> 3448
 <211> 439
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-018-Q1-E1-H7

<400> 3448

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gatgggaata catgggcata ctcttgaaat ccaagcttta ttctactctg ctttacgatg 180

ctcacgagaa atgcttgctg tgaatgatgg atcgaaaaac ctcacccgtg ccattaataa 240

caggctcagt gcattgtcct ttcacatcag agaataattac tgggttgaca tgaagaagat 300

aaatgagata tacagataca agacagaaga atactcacat gatgccacta acaaattcaa 360

catttaccct gagcaaatac cttcctggct tggtgactgg attcctgaga aaggagggtta 420

ccttatangg aatctgcag 439

<210> 3449

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-018-Q1-E1-H8

<400> 3449

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agcgcgagat cgatcgatca tgccggggcg ctgggtggtc tccatcctcc tctcctcct 180

ccatggcctc ctctgcctgc agctggctgc cttggccgag atggacgacg acgacgtcat 240

ggaggacggc agctgcatgc atttcagtgt gtcaccgccg cctgctccgc cggaggacgc 300

ggatgagcgg cgcgactatt tccgcgccat gcatgccaag gatctgttcc ggcacgagca 360

gatgatcacg atgatgggca gcgaccgga ccgtagcatc atgacgcggc gggcgaagga 420

gtcctccaag ctgccggggg tcaactgtcgc c 451

<210> 3450

<211> 344

<212> DNA

<213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-018-Q1-E1-H9

<400> 3450

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 ggggtgtgacg aggtcacggg cccactcgac atgaacatgg aggactgcat gaagaggtgc 180
 aaggagatcg ctgctaagca agggcctagg gacccttaca aggataacaa acttgacatc 240
 ccatgaacta nttaatgctc ctatatcatc tgcctatcca tgcattgcatt gcattgcgta 300
 tgcacactgt gcgtgcctgc ccacaaagtt cgacaacaca ccga 344

<210> 3451
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-A1

<400> 3451

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 aataatggcc tcggttccgg ctccggcgac gacgaccgcc gccgtcatcc tatgcctatg 180
 cgtcgtcctc tcctgtgccg cgggtgacga cccgaacctc cccgactacg tcatccaggg 240
 ccgcgtgtac tgcgacacct gccgcgccgg gttcgtgacc aacgtcaccg agtacatcgc 300
 gggcgccaag gtgaggctgg agtgcaagca cttcggcacc ggcaagctcg agcgcgccat 360
 cgacgggggtc accgacgcga ccggcaccta cacga 395

<210> 3452
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-A10

<400> 3452

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gataaacgat catcctgttc cagaggaaga gataaagatg ttgttacaag cgggcgatat 120
 acatggaact gacacattag attgtgagga atttgtgaca gtcttgcttc acattaaaaa 180
 gatgagtaat gacgagtatc tacctaaagc tttcgagtgc ttcgacaaag acgggaatgg 240
 ttttattgaa atgtccgagt taatggagac tctaagtgat ggtgaactaa agcctgatga 300
 gcaattgggtt aacgacatta ttcaagaggt tgacaaggat aaggatgggc gcatcagtta 360
 cccagagttt gaattgatga tgaaaagtgg atcggact 398

<210> 3453

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-A12

<400> 3453

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 agagctagct accgacgaag acaaggcggg caatggccaa ggcgcccctg ccgcttccgt 120
 cgctgctcgt cctcgccgcc ttcttcttcc accaccctg ctgcacggcg cacggccgcg 180
 ccgaaaacat ctggagggtc taggcgcggg tccgcgcccg cgcgtccgag ctgctccgcc 240
 acgccaccag ccagctcgtc gacctgcccc tcccgccaa cctctccggc gcggggcgtec 300
 gggcctcggc cctcagcgtg cgcaacaacg cgctctgggc cggcggcgtc aacaccaa 358

<210> 3454

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-A2

<400> 3454

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 tcaacgggta catggagctc atggagatgg ccaggaagac cgggctcaag gtccaggccg 180
 tcatgtcctt ccaccagtgc ggcggcaacg tcggcgattc agtcaccata ccacttccgg 240
 gatgggtcctt ggaggagatg gacaaggacc aggacctggc ctacaccgac cggagtggcc 300

gccggaacta cgagtagctc tccctgggct gcgacgcgat gcccgtagctc aagggccgca 360
 ccccatcca gtgctacgcc gacttcacgc gcgccttcgc cgaccacttc gccaacctca 420
 ag 422

<210> 3455
 <211> 377
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-019-Q1-E1-A3
 <400> 3455

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 gcctgggtggg tccttcgaca tcaccaagtt gggcgccctcc ggcaatggca agacagacag 180
 cacgaaggct gtgcangagg catgggcacg ggcgtgcggc ggcaatggga agcagacaat 240
 cctcatatccc aaggggtgact tccttgctcg acaactcaac ttcacaggcc cttgcaaggg 300
 cgacgtgacc atccagggtg atggcaatct gctggcgacc acggacctaa gccagtacaa 360
 ggaccatggt aattgga 377

<210> 3456
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-019-Q1-E1-A4
 <400> 3456

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 aacgggtaca tggagctcat ggagatggcc aggaagaccg ggctcaaggt ccaggccgctc 180
 atgtccttcc accagtgcgg cggcaacgct ggcgattcag tcaccatacc acttccggga 240
 tgggtcttgg aggagatgga caaggaccag gacctggcct acaccgaccg gagtggccgc 300
 cggaactacg agtacgtctc cctgggctgc gacgcgatgc ccgtgctcaa gggccgcacc 360
 cccatccagt gctacgccga cttcatgcgc gccttcgcgc aac 403

<210> 3457
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-023-Q1-E1-E8
 <400> 3457

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 aatggccttc aaggaaacag ggagtttctg gttgaggttc taatgcttag tctgttgac 120
 catgacaatc tagtaaacctt aattggatac tgcgctgatg gagaccaacg tcttcttgta 180
 tacgagttta tgccattggg atcacttgag gatcatttgc atgatattcc acctgataag 240
 gaacctctgg actggaatac acgtatgaag attgctgctg gtgccgcaa gggcttagag 300
 tacttgcattg ataaggcaag tcttctgtt atttacaggg atttcaagtc ctcaaactt 360
 ctactcgttg aagggtttca tccgaagcta tc 392

<210> 3458
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-023-Q1-E1-F1
 <400> 3458

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 cgctctatct ctttcgccga gctcctcgaa accctaagag cgtgcttgac cggcgccgc 120
 gaggtgatgg cgatggaccc tgacgcggtg gcgaacgcct tcgtggagca ttactaccga 180
 acgttcgaca ccaaccgcgc ggcgctggtt gggctgtacc aggagacctc catgctcacc 240
 ttcgagggcc agaagttcca gggccctcc gccattgccg gcaagctcgg atctctcct 300
 ttccaggcct gcgagcatca gatcgtcacc gtaaactgcc agccatcggg tccccacgga 360
 agcatgctca tcttcgtcac cggtttcaaa cgcaacgggc cc 402

<210> 3459
 <211> 87
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-F10

<400> 3459

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gctcgcgagg cccccgcttc tccgctc 87

<210> 3460

<211> 399

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-023-Q1-E1-F11

<400> 3460

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gcgccgacaa ggggtggcgat ccgaggcccg tgagctacca ggtgcgcagg ccgcactctg 120

gccgcgcccc cggcgctctc tactttctgct ataagttcac cgagggtcccc gccgtctctt 180

gtgtctcgga accggaaaagc aaacaagtcc agtacgcaa gaagtacgtg caggactcca 240

agaacacgac ggacaagact atgggtgccgc ccaccgtgta cccaccgccg caggccatgg 300

cgctccgata cccgccgcaa caatattgtt cgccgtacgc ggcgtagccg cggcagcctt 360

acgggtaccc tgctccgcca ncgtacgggt acaatgctg 399

<210> 3461

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-F2

<400> 3461

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gcctcgacgc ataccagttg actccacact gctgcatgac catcatagcc atgtgacacg 120

gccaacagcg tggcttagtc atataaatgt gacgtaatac ctcgatccaa tgtccacgaa 180

caaggattct acatacgtg tcgcctagat ggctgctgtg gccgaccgct gtattcacta 240

cgaagggtgaa ttccgtctca tcatgaacat catcgtcaat gcactgattc ccttgccgca 300

caaccagtct ggcaatcgcc ctatcggtc gtcaactacc atgctgccga gcgatccgga 360
ctgtgatttc tc 372

<210> 3462
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-F5

<400> 3462

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tttctccttt tcttgccacg gcaaaacacc ttcgccggcg agagcatggc gatggcgtac 120
cgtgtcctgg aggtcacctt ggtgtcggca aatgacctca agaaagtgtc gctcttctcc 180
cggactcgca tctacgccgt ggcttccatc tccggattcg acctccgcat cccttcccac 240
agcacccaag cagaccacag caacggctgc aacctctgct ggaacgccgt ggtacacttc 300
cccatcccggt ctgccgtga caccgcggc ctcgcactcc acgtgaggct ccgcgcccag 360
cgtctatacc tgggcgatcg cgacatcgga gaggtgtttg tgccc 405

<210> 3463
<211> 342
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-F6

<400> 3463

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tggtccacca tgggcgaccg agcgggtggc acgatgacga ctaataagcc cctcctcctc 120
gtcgccctgg cgtcggcgct ccttggtgcg gcgccggccg ccgcgaactc tcccgggtggg 180
gcgttcatca cttgggtggc gatgattcag cagagctacg cgctgtccgc gcagaattcc 240
atcgggggatg ggggcactga gcccttggac gagaagctgt ctgacgcgga gaagaataag 300
gtcacatacg tgggtggacce gagaggtact ggctactaca cc 342

<210> 3464
<211> 392
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-F7

<400> 3464

ccacgcgtcc gataatttca atacaggttg aaaacttgaa atcaacacaa aaaatacctg 60

aaaaaggtac aagcaaagaa accttaaacy tgccatggaa cacacgtccc caatggggct 120

atcgttacca tttcaacata caccgaccatt ttctacacac aactttgagt gaagatttat 180

cggacacagg tggtaatcgt ctgacatgtc ctgagatata cggagactga tggtgccagg 240

ctagtgggtt gagtacagga tgagcgcaac cggtagtgtg tatatcacgt tctttgtact 300

caagaatttt gtacagacag aaggcgggtgc ggatagcatg ccttgcatatc ataataattt 360

caatacaggt tgaaaacttg aaatcaacac,aa 392

<210> 3465

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-G1

<400> 3465

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ggggggaggg gaaaacacgt acattcaccc ggccggcaata atggcctcgg ttccgggtcc 120

ggcgacgacg accgcgcgcg tcatectatg cctatgcgtc gtcctctcct gtgccgcggc 180

tgacgacccg aacctccccg actacgtcat ccaggggcgc gtgtactgcg acacctgccg 240

cgccgggttc gtgaccaacg tcaccgagta catcgcgggc gccaaagtga ggctggagtg 300

caagcacttc ggcaccggca agctcgagcg cgccatcgac ggggtcaccg acgcgaccgg 360

cacctacag a 371

<210> 3466

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-G12

<400> 3466

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tccatgtgag ggttgaagca aacaaagatg aggggtgacgc agagataaca cagctattta 120
tatcatatag aggggtattgt gctcgtaaag ggatgcatct gaaggagttg atcttggtatg 180
gcactgacat ctccaaagca ataattgact atgccactag caatgccatc acagacattg 240
tcgtcggcgc atcaactaag aacacattca tcagaaggtt tagaaatccc gatgtcccaa 300
cgtgtttgat gaagatggcg cctgattatt gcacgttaca tgtcatccac aaggcaaaag 360
ccatccaggt gaaggcagcc aaagctcctg caccctttgc tactctccct ccaaagcaac 420
actcgcaacc aaaca 435

<210> 3467
<211> 396
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-023-Q1-E1-G2
<400> 3467

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gtcctgtgta agaaaggac agcgggtggag gtgtcaaagg atcacaggcc gacatacgac 120
gcagagcgtc aaagggttat cgagtgcggt ggatacatcg aagatgggta cctcaacggc 180
gtactctctg tgacccgggc tttaggggac tgggacatga agctgccccca aggtctctccg 240
tcgcccctta tcgcagagcc agagatccac tggaccaccc tgacggaaga cgacgagttc 300
ctcatcatcg gctgcgatgg gatatgggat gtgatgagca gccagcacgc ggtgagcacg 360
gtccgcaaag gcctccggaa gcacaatgac cccggc 396

<210> 3468
<211> 377
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-023-Q1-E1-G4
<400> 3468

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gcaggcaagg gcgcaaccaa taatagcaag tgtgatcatc cgttgatcca tcttgctaata 120

aagcctgcgt gcccttcatt cttcctcgtc tcgatatcga cgacgctccg ttcgggtccg 180
gcaaaccaca tcaagtcgcg atggacatga ataaggtcgc ctgcgccgtc ctcgacgttg 240
ctgactctgc cactgtggtc atcaccgcag acgcacgcgc gtccgcctac agcaaagggc 300
cttcggccgc gttcactgac gtcgggtgccg tacttggcac ctacgtgctc tacttcatcc 360
cctactacct tcagtaa 377

<210> 3469
<211> 375
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-023-Q1-E1-G6
<400> 3469

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gtccttccgc cctatcgccc atgccgatac tttctaccag catatatgga atccctccgc 120
tggtgtcttg ctttttccct cgggtctggcg gcaggagttc ctttctcttc cttgggtcca 180
ttgtcgccg ttccttttct tcgtaccccg atttctcttg ctttgtttcc ttgtcgctg 240
tgcaccgat ccatgtgtgt tggtcatca tttgtattgt tcttggtcgt ccaactgatt 300
agagtttctg gcttggtaga agatcacccc gaccttgctt atcgctcgt gttttccgta 360
ttttttgata ttgag 375

<210> 3470
<211> 392
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-023-Q1-E1-G8
<400> 3470

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ccacaagttc gacctcatgt acgccaagcg tgccttcgtg cactggtacg tcggtgaggg 120
tatggaggaa ggtgagttct ctgaggcccg tgaggacctg gcggcgctcg agaaggacta 180
cgaggaggtc ggcgctgagt tcgatgagg cgaggatggc gacgaggggtg acgagtacta 240
gagaagtttg ctgatgacgc agcatcaggc cagtgtgctg cccttatccc gtgatctgcc 300

gtgagttgct cctgctatcg tgttatgtgt gtctgttctg aagtattgtg tggtttacia 360
cacctgatgt tgtaagagtt gtttaattccc ct 392

<210> 3471
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-H1

<400> 3471

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ttcctggcgg cgggtgtgctt ctttgcgtcg ggcgtcctct tcgtcccaga ggctatcggg 120
tccccatccg gcgcaggagc cgtcaccgcc gccaaactgg cccacgtcct ctcccttgcc 180
acctcctggg gcgcgcgcct ctggggccacc ttcacgcggc gcatcataat gttcaagaac 240
ctgccgaggg acatgttcgg caacttgcag agcaagatgt tcccggccta cttcacgctt 300
atatctgcat gcgcagccat ctccgtcgcc gccttcgcgt accttcaccc gtggaagacg 360
gcgtccactg tgcagcgcta ccage 385

<210> 3472
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-H12

<400> 3472

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tcaccttoga ggccggcaag acgtaccgcc tccgcgtctg caacaccggg atcaaggcgt 120
cgctcaactt ccgcattccag ggccactaca tgaagctggg cgagctggag ggctcccaca 180
ccctgcagaa cagttacgac tcgtctgacg tccacgtcgg ccaactgcctc tccgtgctcg 240
tcgacgccga ccagaagccc ggcgactact acatgggtggc ctccacgcgg ttcattccacg 300
acgccaaagtc cgcgtccgcc gtcattccgt acgccggctc cagcgcctccg ccggcgccga 360
acatgaccga gccaccggcc ggctgggcct ggtccatca 399

<210> 3473

<211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-H2

 <400> 3473

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 ctgctcgaac aggggatgta atgacaaccc cttcccctgg aatgcatggt gatgatgttg 120
 ctggttccaa cttcgttttc agtaataata acaacaaagc gaagaccctc ctacctacc 180
 tatttgcttg agcggctctt gtccgcgcca caagatacca attggtgctg tgggaatatt 240
 cagttacgat gaccgcgttt agttcagttt cttttttttg ggggttggtt cgatcatttg 300
 gctgtagcgt gaatcgcttg gacaacagac tccaattact aagcaaatat tttttcttct 360
 gcatatattt gaagaatctt gttcagggcc ctttttcaaa atgaacgcgg ggaatttttt 420
 ttttcttggt tccaatgtct tt 442

<210> 3474
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-023-Q1-E1-H5

 <400> 3474

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 cagtcaagat gatgactcat attctgtcac ttcttcaact gtaacttcag caagagctgg 120
 gaaaactaag aagacaactg ttgctgttgc acctacattc gtctgtgcta atcgtgctga 180
 gaagagagga gagttttaca caaaattaga agaaaaacgc aaggcttttg aagaggagaa 240
 actccaagca gaggccagaa agagggaaga ggaagaagaa gctctaagac aactgaggaa 300
 gaacttggtc gtccgagcaa aaccatgcc aagcttctac caagagggac cccacacaaa 360
 gggttgaactt aagaagggtg ctccaaccct tgcaaggctc acaaaattga cacggagaaa 420
 gagctgcagt gaaaccc 437

<210> 3475
 <211> 388
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-H6

<400> 3475

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ggggcatggg caccattccg gcgacaacct tcgcagtaat cataccggtc tgcttccgta 180

ccacgtgtgg tacagcagtc gacgacaatt gcactaacgg agtcttgtag cgccacatgt 240

attgacgaca ctaggcgcgc cgggtgttcgt gaataatgtc atgcactaga tccatggcgc 300

gaacgtgaag gtggcgtgca agcatctcat cagcgggact gctcgagcgc tccatcgaca 360

gggtgatgga ctggaaccgt acgtacac 388

<210> 3476

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-023-Q1-E1-H7

<400> 3476

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cctccctcac caaataaggt cccgcccttt tccgacattc acagggggga caggaaatca 120

gcggccatgg cctcgattcc ggcgacgacc ttcgccgtca tcttatccgt cctcttctgt 180

gccgcggctg gcaccgccgt cgacaacgac ctccccgact acgtcatcca gggccgcgtc 240

tattgcgaca cctgccgcgc cgggttcgtg accaatgtca ccgagtacat cgcgggcgcc 300

aaggtgaggc tggagtgcaa gcacttcggc accggcaagc tcgagcgcgc catcgacggg 360

gtgaccgacg ggaacggcac gtacacgac gagctcaagg acag 404

<210> 3477

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-023-Q1-E1-H8

<400> 3477

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aactctccgg ccaccattga tccgacctcc cctaagccat ctatgagtag agaaaaacag 120
tgaacgccac ctctgtactc gccccacctt atggcgcgtc gctcctgcag taccggccca 180
cgctctgcgc ggtgctcagg tggttacggct gccctcaa at ccgtcgtcgg accattggca 240
ctgggggcaag caaaagcacg gacaggtgct cggcgtgctg caacggcttc cgatttgccc 300
ggctagatga aagacggctg gggagcatct tctctgggga acaccgcgcg tcatgggtgc 360
cttgccgaag ttcagggacn gcgtgattgc tcatcgtcgt tcatgctcca acgtggggcn 420
acccatctc 429

<210> 3478
<211> 57
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-024-Q1-E1-A10
<400> 3478

cccggttcga cccacgcgtc cacagaatca agaaacatct tggaatgtct gtataag 57

<210> 3479
<211> 366
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-024-Q1-E1-A3
<400> 3479

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ctacactaca ttagagagag gtcgagcgcc cctcctccga tccgccggcc cgccgagagc 180
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tgctgctggt cgtgtcggcg ctggcgacct tggcccgggc cgaggacccc tacctgttct 300
tcgagtggaa ggtgacgtac gggagcaggt ccctgctggg agtgccccag aaggatcatcc 360
tcatca 366

<210> 3480
<211> 315
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-A9

<400> 3480

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agtcgggtgga gaagacctgg agcttgtcgc cgaggccctt ggcgaagacc tcggcgggtga 120
acatccgcgc gtagccgtgg atccgcctcg tcacggggcca cacgcacacc accgggttgt 180
cgggcctggg cgtcaccgtg ttctccaccc ggtacaagaa gccgcggccc gccaccggcg 240
gctgctgccc caggaacttg aggttgcgct cgaacttggc ctccggcagg tccgtgtcga 300
ctcagttgtc gatga 315

<210> 3481
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-B12

<400> 3481

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gccactgggt ctggggcaag tacgtcaacg tcgacacaca acacggcggc gccagcccga 180
gatccaacgg cgtctgatct gagcaagctg cagcaacacc tcggcacctg acctggccat 240
gcatgcacac gtatactata atctaacaac gtagctgacc tgggcaaatt gccagcctga 300
caggggccag ggtgctcgaa tgtctcactc tcaccgccga ctaactttcc atcaaaattg 360
attcttggtc atactccata gcatgcacag a 391

<210> 3482
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-B2

<400> 3482

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 ccaaggttcc cccaggaaag aacatcacag ccaactatgg tagtgattgg ctagatgcca 180
 aggcaacatg gtatggcaag cctacaggtg cgggccccga cgacaatggt ggcggtatgtg 240
 ggtacaagga cgtgaacaag gcccctttca acagcatggg cgcattgtggc aacgtcccca 300
 tcttcaagga tgggtctgggt tgtggatcct gcttcgagat caagtgcgac aagccagcgg 360
 agtgctctgg caagcccgtg gtgggtataca ttacagacat gaactatgag cccatttgcg 420
 gcatacactt cgacc 435

<210> 3483
 <211> 445
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-B6

<400> 3483

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 anggattggc atatacgtga ttctatgaca ggccacacaa tactgaaggc gacaagtaaa 180
 tgggttatga tgaacaaact cactaggaag cttgcaagaa ttccagatga agtgccggact 240
 gaaatagagc catactttgt tgggcgttct gctattgttg atgaagacaa ccgcaagctt 300
 ccaaaaactgc cagaggggtca aagcacttct gcagctaaat atgtgaggac aggcttgact 360
 cctcgttggg ctgatcttga tataaaccag catgtcaata atgttaaata cattgcgtgg 420
 aatcttgaga gtgcaccgat tacta 445

<210> 3484
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-C11

<400> 3484

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 gtgtcgaagc cggcgctcct tccttacagg cccgcctcct ctctgtccgt tctgtcttgg 180
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 tcatcagtca gatacacttt taccaaggaa tttttcagaa tcactccacg agaggttcag 300
 ctctcgaagc tagagaacca gagctctacc aaacaggcca ggacgtctct caaatcccca 360
 gttcagtaac tggctaactg taggagaatg agagagatgg agaacggccg cgctaaacgc 420
 ga 422

<210> 3485
 <211> 387
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-024-Q1-E1-C12
 <400> 3485

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 gacgtttgtg ggggcaaccg tgcattccatt ccctaccggc gattggggcgt ggaaggcgggt 180
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 gtcggcgctcc ggtgctgcct aaattttggg caagaacagg taccacagga tgaggcgcat 300
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 ttgctggacc gttgtctcct tataatg 387

<210> 3486
 <211> 456
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-024-Q1-E1-C2
 <400> 3486

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 cgtggccgcg gcagcgcagg cgcaggagac gtgctcgggg accgtccccg cgccgcgcg 120

ccgcggggcg cgggtgtccg tggccagctt cggcggcgcg ggcgacggac ggacgtctaa 180
cacggcggcg ttcgcgcgcg ccgtcgccag catcgagcgc cgcgccgcgc cgggcggggc 240
ggagctctac gtgccgcccc ggggtgtggct cacggggccc ttcaacctca cctcgcgcac 300
gacgctcttc ctgcgcgcgc ggcgcgtcat ccgcgccacg caggacacat caagctggcc 360
tctgattgaa ccgctgccct catacgggag aggacgtgag ctgcccggcg gaagatacac 420
aagtttaatc catggcaatg ggcttcagga tgttgt 456

<210> 3487
<211> 449
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-024-Q1-E1-C6

<400> 3487
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ttcgtcattg ctactctcct cttegtcgcc atggttgttg caccgatggc cgaggcaaag 180
tccgctgatg cccctccgc cgacgcccc gcccccgtg ctgacgcacc tgccgatgga 240
cctagcggac cggcgggtgc acctgggtccc cagggcgctc aggggtctatc gggcaatgag 300
gacgacgatg atgactccac caactaaggc caagcacgtc ggtccggttg catttggaac 360
aagacatgga agaaaagtga gagcaatgtc gtttaaaaac aaaagtccat aataatgtgt 420
ggtcacccgt gatatgttct tgctctccc 449

<210> 3488
<211> 440
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-024-Q1-E1-C8

<400> 3488
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cgacgtgtac agcttcggca tctgtctctg ggagacctac tgctgcgcca tggcctaccc 180

caactacagc ctcgccgaca tctcctacca cgtcgtcaag ctgggcatcc ggccggacat 240
 cccgaggtgc tgcccgcggg cgctggtgga gatcatgacg cgggtgttggg acggcaaccc 300
 ggacaaccgg ccggagatgt cggaggtggt ggcgctgctg gagaagatcg acaccagcag 360
 cggcaagggc ggcattgacgc ccgtcgacga cgtcgcgcag ggggtgctcct gcttcggctt 420
 caaccaccgc agcgtcgctt 440

<210> 3489
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-C9

<400> 3489

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 ggggggcgcc gtacaagaac cgcaccgtcc agcgcgcgaa cccgcacgac gagttccgca 120
 tgatggcctg cttccacagc acgcgaaaca tccccacat catcaacctg atggagtcct 180
 cgcgcggcac gcggaagcgt ggcattaccg tctacgccat gcacctcgtg gagctctccg 240
 agagatcgtc cgccatctgc atgggtccaca aagctcgtcg caacggcatg ccgttctgga 300
 acaggcggcg caacggcgac ggcggcggcg accagctcgt tgcgccttc gagacgtacc 360
 agcagctgag ccgcgtgtct atccgggcca tgacggccat ctccgacctg gaaacgattc 420
 acgaggacgt cgtc 434

<210> 3490
 <211> 454
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-D2

<400> 3490

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 ctcgacgccg tcttttcttc ctagtgccca gctttattgc agatccagcc ctctgacatc 180
 cgtcttcttt cacctctcca acatgaaggt caacaccaag atcaagctgg agccgggtcat 240

ggcgccgctcg tcgtccctgc cgcggagcgc cagcgagcta cccgacccgc cgtcacccgtt 300
cagctccaac acggcgcacc acccgtctc cgtgccacc acacctaggt tgccttattc 360
gtgctcgtcg ttcgccaca tggtagcccc gccaccgac acaccgccga tcacgccna 420
caagaagcag gacgacaagc ccaagccgac gccg 454

<210> 3491
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-D3

<400> 3491

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ccctcctcc tccaacaag gcaacaaca tctgttcgg ccgcaaaca aaacccaaaa 120
aaaaaacaca ctgaaccaa taatccgat ccacagaaac ttttctctcg gtccgttcga 180
tcgatcgtcg ccgtgtcgtt tgccagacac catcagcacc caaaaccatg gcctgcaacc 240
tggctcagtg cgccaccgcc gccgcggcga ccgtcgcgcc ccgcacccct cgccctgctg 300
cgtccgcgtc cgtctccttc tccgcgagga agccggcggg cggcagcctg cggctgcagc 360
ggcaggcgtg ctgcgagccg tcggtggcgc cgtcgcgggc ggtgttcg 408

<210> 3492
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-D4

<400> 3492

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gcagcctgcc tgcgtgtggg gtgatggcta ggcacttcaa gtacgtcatc ctccggcgcg 120
gtgtcgcggc ggggtacgcg gcgaggagt tcgccaagca gggcgtcaac cccggcgagc 180
tcgccatcat ctccaaggaa ccagtggccc cttatgagcg ccctgcactc agcaagggat 240
acctcttccc tcagaacgct gcaagactgc caggcttcca cacgtgtgtg ggcagcggtg 300
gagagagact acttctgaa tggtagcttg agaaaggcat tgaactgatc ctgagtactg 360

agattgtgaa ggccgacctt gcttcaaaga ctctgaccag tgcagctgcg gaaaccttca 420
 catatgagac cttgct 436

<210> 3493
 <211> 293
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-D6

<400> 3493

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 cggcgacgac cttcgccgtc atcttatccg tctcttctg tgccgcagct gtcaccgccg 180
 tctacatcga cgtcaccgac tacttcatcc aacgcctcgt ctattgctac acctgccgct 240
 ccgggttcgt gactaatgtc accgagtaca tcgctgccgc caatgtgatg ctg 293

<210> 3494
 <211> 171
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-E10

<400> 3494

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 caatgctctc cgagaactac acgcttactc tttctcataa aacaacaaaa caagatgctg 120
 ttatgggaat tgtggctctg gtgaaaataa agaaacgact acatcttcag a 171

<210> 3495
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-E2

<400> 3495

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. gccccgctga tagcagagggc aaagaagaag agagtcgccg ccgccgccgc cgaggagaag 180
 aaggtgcagg acaacttctg ctcgacgctg tgcgagggca ggaaggggat ggacctggtg 240
 gtgtgcaagg agtcctgcga cctctcacag cgctccaacc tgggtgctgta cggccggatt 300
 cagtgcgaagg gcaagtgcac cgagcagaag ggcattaccg cgccgcagat gaaggtgtgc 360
 caagagggcgt gcgacaagga ctacgtggtc aaggcggctg aggtcaccaa ggcctgcaac 420
 acaacctgcg 430

<210> 3496
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-024-Q1-E1-E9
 <400> 3496

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 gcgcccgtcc ttcttctctg cctccgttcc attccgtccc gccctccacc gccgccgccg 120
 cattcaggga tggagatgaa gaagatcgcc tgcgccgtcc tcgtcgccgc ctccggcgcc 180
 accgtggcgc tcgccgcgga ggctccggct ccggccccca ccagcgggtc ctccgccgtc 240
 gcgcccgcg tcggcgccgc cctcggggcc gccgtcgctt ccttcttctg ctactacatt 300
 cagtgagccg gccggggcgc ccggaggccg aggaagagac gaacgggaga gagagtgaca 360
 tggctgcgcg cattccgatg cgtgggcatg ttttttgatt cgacaca 407

<210> 3497
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-F1
 <400> 3497

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 ctccataatt gttggatttc aatacattca ggaccgaggc cggcgaatca atcaagaacg 120
 ccacctecta ggtagggcg tgttggaact gccatggggg acaggccggc gccgatcgag 180

aaggtcgcgg tgccggagaa gatggccttg ttcctccacg ccgcgcgtcac gtcaccggga 240
cgccagcagc atcacggcgc ctcgtcgcac gaggcgcccc ccgcgaacat cagccgcggy 300
acaacaacag ccaggaataa gcagcagcac ctgccggtga gccncggggc gtgcctctgc 360
tcgcccagccg ttcacgaagg ctcgttcccg tqcaggtcc accgcggc 408

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<210>      3498
<211>      375
<212>      DNA
<213>      Zea mays
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<223>      Clone ID: LIB148-024-Q1-E1-F12
<400>      3498
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<210>      3499
<211>      451
<212>      DNA
<213>      Zea mays

<223>      unsure at all n locations
<223>      Clone ID: LIB148-024-Q1-E1-F3

<400>      3499
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 tgttcttgc ctncctcttt ttctttctgt t 451

<210> 3500
 <211> 275
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-F8

<400> 3500

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 cgagcaccca ccgacgaacg aagaggggtgc ttgcacgtg catgtgacat ccggcgatgc 120
 cgatcgccg ccggcgcgac ttgaactaac gacgacgtac gtgcgaccgg gccgggcgtt 180
 ggattagtcc ggccctgagca atgggcaaga tcgagtactg cgtggtagcg cacggagcag 240
 tgggtgctggc ggagcactac ggcgacgagc atgca 275

<210> 3501
 <211> 444
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-F9

<400> 3501

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 ataaggaaag gtcccgccct ttctctccga catccacagg ggggagggga aaacacgtgc 120
 attcaccg cggaataat ggccctcggt ccggctccgg cgacgacgac cgccgccgta 180
 atcctatgcc tatgcgtcgt cctctctgt gccgcggctg acgaccccaa cctccccgac 240
 tacgtcatcc agggccgct gtactgcgac acctgccgcg ccgggttcgt gaccaacgtc 300
 accgagtaca tcgcgggcgc caaggtgagg ctggagtga ggcacttcgg caccggcaag 360
 ctcgagcgcg ccatcgacgg ggtcaccgac gcgaccggca cctacacgat cgagcctcaa 420
 gacagccacg angaggacat ctgc 444

<210> 3502

<211> 56
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-024-Q1-E1-G1

 <400> 3502

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<210> 3503
 <211> 365
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-G10

 <400> 3503

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 aaaaaaatcc aaaagaaaaa aatgacactc aaggagcaag caaaagaaac tcgaccaggg 120
 catcctgatt ataatgtttg agatgccttt taacatttgg tgtggtggat gcaattccat 180
 gatagcgaag ggagtaagat ttaatgctga gaagaaacac gttgggaatt attactctac 240
 caagatatgg agcttcatca tgaaatcgcc ctgttgcaag catgggattg tcatacagac 300
 agaccaaca gatactgaat atgtcataat cagtggggcc cacaagaaga cagaagattt 360
 tgatg 365

<210> 3504
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-024-Q1-E1-G9

 <400> 3504

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 aggggtgggct gaacaagttc catggccagc atgcgctcag ggagcgagcg aggaagctcg 120
 accagggcat cctgattata aggtttgaga tgccttttaa catttggtgt ggtggatgca 180
 attccatgat agcgaaggga gtaagattta atgctgagaa gaaacaagtt ggaaattatt 240
 actctaccaa gatatggagc ttcaccatga aatcgccctg ttgcaagcat gaaattgtca 300

tacagacaga cccaaaaaat actgaatatg tcataatcag tggggcccag aagaagacag 360
aagattttga tgttgaggat gcagagacat tgctgctgcc agcagatgaa gatcgagac 419

<210> 3505
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-H12

<400> 3505

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cgacgcagtt cgagttcgag gaagtcatgt cagcgatgga cagagccgac ggcgagtttc 120
tcgaggacct cgacatctat gtctcaagct tcttagcgtg atctgctgga tgtaatgtaa 180
ccgatgaacg ctagggaatg ggaatctgag gcagctgtta ctgttaccat gagttgctct 240
ctgccgtttg tccaggggca gagcagggaa gaacacatgt tcttcctcgg cccgtcccgt 300
tgtaaacctt aggatgtgag aatattgaat gtccatctc tctctctctt tttcttcggt 360
cgagggtttg caaggaaaac aatttcataa t 391

<210> 3506
<211> 449
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-024-Q1-E1-H7

<400> 3506

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acagagcgct tcatggtgaa gaaacaggac gggctggtga agctgcaggg gtccaagcaa 120
gggaggaagg ggcagctcgc gatcgacgcc gagatcttcg aggtgacacc ggcctttcac 180
gtcgtcgagg tgaagaagtc ggcaggcgac acgctggagt atgagatgtt ctgcagcaag 240
ggcctaagac cttcactcag cgacatctgc tggagcagcc gatctgagga gaacatggct 300
ccttcagtgg ttcagccatc acaattggag ccacctctt agaccgtctc cgacagttta 360
ctcaccctc ttagtcaatt gttatttaag tgcagtctct tcggagatgc aattacagtc 420
catcctctct tttttttccc tttctcaaa 449

<210> 3507
 <211> 275
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-A10

 <400> 3507

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 tcgccgctgc aactgcaacc catgccatgc cggcttagtg attgggtata atttggcttg 120
 gcagcagcca gcattattat gtgctgatct gttatctttt actagtttgg tcgtccgata 180
 tctttctttc tttttccccc cttttcgact ctgtactgaa actgctgaga gattcgcagt 240
 attgttgtat cgtattcata tgctactgtt actct 275

<210> 3508
 <211> 381
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-A11

 <400> 3508

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 ccacacacac acggtgtcga tggcgggccgt aataaggagc cgccgccgcg tgtccgtttt 180
 cttctacgtc gtcctcgccg cagctgcagc tgcagccgcg gcgcaagcat ccaataacgt 240
 cacctccgac gaggagtact gggcggagcg cgccgagggtg gtcggtcgc gcaacctcgc 300
 cgcctacgtc agcgaccccg tggccgccac gaaccgttc aacgcggacg tgctgagggc 360
 cacgacgcgg cgggcgctgg c 381

<210> 3509
 <211> 446
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-F1

<400> 3509

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ggccccggca gagtcaccga aggaaggcag tgctgccaaag gcacctgagg ctgccaagag 180

aactgctgcc cccgctgaag caccgggagc cgcgctccacc cccgtcgccg ccgctgcccc 240

atcatcgctc tctaggaagt ctggtccagc taccgcgcca gccaccgcct ctacaccccc 300

ttcttccacg gacgaggagt tgagcccttc cccgccagca tccaccgccg cggcgctcccc 360

tgcggtgan ggaccggctg ctgatgactc cgccggtgct gctgcccttg gaagtggagc 420

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<210> 3510

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-F11

<400> 3510

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gggcacgtct gcctgggcgt cacgcgtgct cgctgcgccc tctgtcttc acccccggca 180

gcggcagggg caggaggaga cgacggtcgc caccggcgcc ctgcaccggc ggatgtcgga 240

tcgggagctc cgccccctgc gctccatcag aatcacaggg gacggtcgat gcctgttcag 300

gtccgtcgcc tacggcgccct gcctgaggag aggaaagcat gcgcccagcg acagcgccca 360

gaaggaaactg gccgacgagc tccgagccaa agtagctgat gagttcgtca agcgaagagg 420

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<210> 3511

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-F7

<400> 3511

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aaggagcaca tgcattcttc atggagtcag tgcctttcaa cacaatatgc accttcacac 120
tcttcagct aatctatctg ttgatcgtct ttgggatgac atggatacca gtagcatgaa 180
tcctcttccc actgctcttc ttcttctca ttatcatcag gcagcacttc atcccgaat 240
atcttgatcc gatccacctg agggaattac atgcagccga atacgacgaa ctgaaagggt 300
ttacacctga tccatcagtg tgtgatgacg agtctgttcg cagcggagat gctcatcctg 360
gatat 365

<210> 3512
<211> 312
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-G1

<400> 3512

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tctattgatg taatcttgag atgccctctc aaatcactgt aatgggggttt aaaaaacaat 180
cattgtaatg ggagttatat atacttttat cttaacatct atttacacca gcaagtctctg 240
gtgtatgcat gctgtaccgt gtttactagt gaacactaca ctggcggacg ggtccgcgcc 300
accgcgatca ga 312

<210> 3513
<211> 455
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-G11

<400> 3513

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accaacacaa atcatggggt tggggatcgg ctgcactcag gcaggccgcg catcgtatcc 180
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cgagccgcat tctgtcgtca accgagcatg gcgcgacatt attcaaggtc aagaacaggt 300
accgcaggat gaggggcatg gaggatgatg tgacgagttc gtgaggtcgt cgtctcccag 360
tcaactttgg gttgctggat cattgtctca tatgatgtaa ttatttattt tattttgtac 420
agaactccta ttatatagta aagatgtgac attcg 455

<210> 3514

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-G3

<400> 3514

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ccaaccggcg gaaaaagggt cacaaggccg gccggaccca ttccgaaccc ttccccggcc 120
ggcggacggc cggcggaaccc ggggccgaag caacgcccc aaggcaacgc acgcacgggt 180
ctaacggccc gtttccgttg aacctcaag cccgggaacc ctgcgcggccg gttccggtcg 240
ccccaaaaac ttagtacgtt catgaacacg accgccttg tcaggctctt ggaaatgtgc 300
aacctgcatg tgttttgcct gcgagcgttt ttctttggc tgtcgaccga tcgtgaatcc 360
gtcacgcagc actc 374

<210> 3515

<211> 463

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-G5

<400> 3515

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gcggcgatga aggcagccgt ggccgctctg ctggtgttcg ccgcggtgtc gcctgccgcg 120
cgcgcggttg cggcggaggc ggaggcgaag gcgaaagctg tgggaagcgc gccgtcggtg 180
cccgttggt cgctggacat cgcgcagctg ggcgccaagg gcgacggcaa gtcggacagc 240
accccgatgg tgctcaaggc gtggaagcac gcgtgcgaag cgacggggca gcagaagatc 300
gtcatcccca agggcaacta cctgacgggc gcgctggacc tgggtgggcc ctgcaagtcc 360

tccatcatca tccgcctcga cggcaacctg ctcggcaccg gcgacctcaa cgcgtacaag 420
 aggaactgga tcgagatcca gaacgtcgac aacctgtcca tca 463

<210> 3516
 <211> 455
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-G6

<400> 3516

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 gctgcgagg gcccgcctcg ctgtcttcta gcaggaagca gcagcagcag cccgacgacg 180
 ccggctgcgg cagcagcagc agcagcagc actaccagca cgacgtgatc atgctgaggc 240
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 cgtggctctg cctgcggggc caccgcgagg gtggacgcct cgtgctgcgg cagatgcgcc 360
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 acccgaggag ccgcgcgcgg ccgtgcgggg gcggc 455

<210> 3517
 <211> 456
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-012-Q1-E1-G8

<400> 3517

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 gcgcgcgcgg cggcggtggc ggtggcgagg ggggcgccgt cggtgccggc ggggtccgctg 180
 gacatcgcgc agctgggcgc caagggcgac ggcaagtcgg acagcacccc gatgatcttc 240
 aaggcgtgga agaacgcgtg cgaggcgacg ggggtacaga agatcgatcat cccgccgggc 300
 aactacctga cgggcggggt ggagctgaag ggcccctgca agtcctccat catcatccgt 360
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atcgagaacg tcgagaacct gtccatcaac ggccac

456

<210> 3518

<211> 210

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-G9

<400> 3518

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tgcctataaa tagtgaacag tattccgtta ctgttcacgc attctgattt ttgcaatcgc 120

atctctcgga atacaacctt tgtcaaggca taggtattat tgtatttaat gattcaatgt 180

attaagtgaa tatgatataa tgtatctgtg 210

<210> 3519

<211> 468

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-H1

<400> 3519

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tgcacttgtc cgacgactac agcaagccgc tgacctggga caccgcgta aggattgctg 120

ttggtacagc ttgtgctctg gagtacctac atgacgcgtg ttcacctcca gtgatccaca 180

agaacatcaa ggcacccaac gtcttgctcg atgctgacct caaccctcac ctactgact 240

gcggccttgc atacttctat gaggatccga gtcagagcct gggaccaggg tacgatcctc 300

cagagtgcac aaggccatca ggttacgtta tgaagagcga tgtctactgc tttggtgtcg 360

tcatgcttca gctgttgacc ggccggaagc cctacgacag ctggaagcct agagcggagc 420

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<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-H11

<400> 3520

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gaaaaaattgc taggcttgag agcctcatgg atggaacttt accagctgaa gaattcatga 120

atgaagagtt tttatcactt atgaatgagc ataagatcct ccaaagaaa tatgaaaacc 180

atcctgatgt tttgcatgct gaaattgagg taaagagact ccaggaggaa ttggacatgt 240

tcaggaactc tgtggacgag aaagaagttc tacaggagga gatacaagat ctgaaaaatc 300

agttgcatta tatgctttca tcacgtcat caatccgtag gctctggcct ccagtgccgt 360

tgtctcaggg aagtaattct gaacgtggaa caaagatat agatggagat actaattttg 420

tggacactc 429

<210> 3521

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-H5

<400> 3521

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cgacgacgtg ccgccacatc cacatggcgg acgacgccgt cgccggcgga gcggccgttc 120

gctgcgcagg gccggcgccg gcctcgctgt cttctagcag gaagcagcag cagcagcccg 180

acgacgccgg ctgcggcagc agcgacgacc actaccagca cgacgtgatc atgctgaggc 240

ggacgaggag cggggcgggc ttcccgccgc cgatctccgt gatcggcaag ggcgggcggc 300

cgtggctctg cctgccggcg caacgcgaag gtggacgcct cgtgctgccg gaaatgcgcc 360

tgccgtcgca aggactgctg caaccctgca aggaggacgg caggttcaag ctcctcatgc 420

acccggaggc ccgcgcgcgg ccgtgcgggg gc 452

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<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-012-Q1-E1-H6

<400> 3522

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 tcccaaccat gagggagatc ctgcacatcc agggcgggca gtgcgggaac cagatcgggtg 120
 ccaagttctg ggaggtgatc tgcgacgagc acggcatcga ccacacgggc aagtacgccg 180
 gcgactccga cctccagctc gagcgcacga acgtctacta caatgaggcc ggcgggggcc 240
 ggttcgtccc gcgcgcgctg ctcatggacc tcgagcccg caccatggac tccgtgcgt 300
 ccggccccta cggccagatc ttccgccccg acaacttcgt cttcgccag tccggcgccg 360
 gcaacaactg ggccaagggc cactacaccg agggcgccga gctcatcgac tccgtgctcg 420
 acgtcgtccg c 431

<210> 3523
 <211> 364
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-012-Q1-E1-H7
 <400> 3523

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 aaggacagcg acaaaccgct taagggaccc ctcaccgtcc gcctcactac cgagggaggc 120
 accatgtccg tctacgacga tgtcatccct gccaaactgga aggccaaacac cgcctacacc 180
 gccaaataat taacttttagt gctgacaata ctttaagccg acctatgcta gctatactag 240
 attgggttgg atcccaagca atgcattaca catgcatgca ttggaccgtg atatctattt 300
 gctaccacta ccctattacg acagtgatgc tggcgccaac aatgatggtg tcctcctcct 360
 tctc 364

<210> 3524
 <211> 444
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-013-Q1-E1-A6
 <400> 3524

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cgccgctcgtg gcgctgctgt ccgccgggct cctcccgag gcgctgggta agggtagggg 180
aagcaagcgg aggagagcgg cgatgcggcg gaggccatga agatccagga cgacttctgc 240
tcgacgctgt gcgagggcaa gaaggggacg gacctgggtc tgtgcaagga ctctgcgcg 300
ctctcccagc agtccagcct gctgctgtac ggcaggatcc agtgcaaggg caaatgcacc 360
gagcagtaac ggcatactg cgccggggcca taacgtctgc caggaggagt gcgacaaggc 420
gtacgtggtg aaggcggccg aggt 444

<210> 3525

<211> 283

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A7

<400> 3525

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cctggcgatt caggacctgc acgatttgct tacggcgagg gagaaagagt tgcttgactt 120
gggcgctgag ctgcgcgact gcacgaggct cctgcagcac gatccgttca acggcgacgg 180
acgtaatat ggcgctgaca caatgatcac accgattggc ggcacatatc cggcgatcga 240
ctgcttgat gccgcggacc ttgtggtcga gaccatgtcc cct 283

<210> 3526

<211> 308

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-A8

<400> 3526

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tctcctctaa cgtcacgttc cgtggaccat tatggcgaag ggctcacagc tgggccaccg 120
tgggagtcac ggcgatgctg tatgtcatct gtcgccctt cgtgtcgggt acggctgtca 180
gagccgtgct ggcgtcagtc gcatcgtagg cgccgtccta agcgtccacc agcacttccg 240
ctggtgcggg tgccacggcc gtaagcggag cggcctacgc ctctgtgccc actgccgggg 300
gctctctc 308

<210> 3527
 <211> 365
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-A9

<400> 3527

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 ggcggcatga tccgcgactc gaagcggcac tacgggctgc gcacgcggag cgacggcgac 180
 ggcgtctccg tgctgtcgtc cagcaacgtg tggatcgacc acgtgtccat gtccagctgc 240
 tccgacgggc tgatcgacgt ggtgaacggg tcgacggcca tcaccgtgtc caacangcac 300
 ttcaccgacg acgaccacgt gatgctgttc ggcgccagca acgacagccc gcaagaagcg 360
 gtgat 365

<210> 3528
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B12

<400> 3528

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 cctcgacgcc gtcctttcct cctagtgcc agctttattg cagatccagc cctctgatcc 180
 tcgtcttctt tcacctctcc aacatgaagg tcaacaccaa gatcaagctg gagccgggtca 240
 tggcgccgtc gtcgtccctg ccgcggagcg ccagcgagct acgcgaccgg ccgtcaccgt 300
 tcagctccaa cacggtgcac caccctgtct ccgtgcccac cacacctagg ttgtccttat 360
 cgtgctcgtc gttcggccac atggtgacct cgcccaacga cacaccgccc 410

<210> 3529
 <211> 412
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-B2

<400> 3529

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cggttgcgca ggacacgggtg gtgctcccgt ggacacgccg cgggttcccg gcgcttggtc 120
catcatcagc gagaacgcgg gcgtgtcccc gatgcacctg gtgatcatgc ggagcgacaa 180
ggccatcatg ttcgacacgg tcaccacggn gccgtcgctg ctgagggtgc ccaaggggaa 240
ctgccgcctc gatctccgca gcaagcaagt cggcgccaag gactgcgccg cgcacgccgt 300
cgagtttgat tacgcgacag gcggtgtcag ggccctcaag gtcttgacgg acgtgtggtg 360
ctcgtcgggc gcgctcgacg ccgaggggcaa cctggtgcag accggcggt ac 412

<210> 3530

<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B5

<400> 3530

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tgcagatgga cctggaggac atccgcagcg gcaccgtcgt ccgcaccgtc cgccccggcg 120
gcacgggaag ctgcctcgcc gacgagagcc acatcatctg ggacaagggc cacgtcgtgc 180
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gggtcgccac cccacctgaa gactgaactg gaggagacga actgcagtat gtacgtgctc 300
tcgtccata tccccatggg aagaacgtac ggattcgctc gcgtgacgat gatactatgc 360
gatgcatgca tgctcaagag tcaagatgtc actgtcttct gtgtatttta gtacagccac 420
gtacattgtc gccatccaac atcactatgc atg 453

<210> 3531

<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B6

<400> 3531

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ttttcgttgc cgtttcttca ttagcgcgaa caaagttttg tgccggtcta tcggccgccc 120
ctttcctccc ctattcatca agaccgcaat aactgtcgct acctatgctt ctcaactgtg 180
atTTTTggac acaatatgtt aaggTccatt caattcta atgagcgctg atgaggctac 240
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<210> 3532

<211> 352

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B7

<400> 3532

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catcttgcta ataaccctgc gtgcccttcg ttctcgtctc gatcccgacg acgctccctt 120
cggctccggc aaaccacatc aagtcgcat ggagatgaag aaggtcgcct gcgccgtcct 180
cgccgccgcc gcctccgcca gcgtggctct cgccgccgag gtcccgggcg gcggccgcat 240
cagcgccctc tcggccgcgt tcccgggcgt cggcgccgtg ctggggcgct ccggtgctctc 300
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<210> 3533

<211> 193

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-B8

<400> 3533

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ggagggataa attacgtcac aattgtcaca acttaggtct cctacttctt ctttttgtac 180
acagtatctt aaa 193

<210> 3534
 <211> 200
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-C1

 <400> 3534

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 gtgtgtgttt ggcacggctc cggctacttt taaattgact ccggctccaa catttttaca 120
 agaggaattt ttaataaatt atttggcaaa acgacatctc ttgtattttt atttgatata 180
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<210> 3535
 <211> 387
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-C10

 <400> 3535

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 agccacctga ggcagcggat cgcggcgctc gcgcaggaca agatcttcaa agatgctcat 180
 caggaggcac tgaggaagga gatcgagagg ctgaggcaaa tctaccacca gcagagcctg 240
 aagagcggca gggagcccga cgcggccccc tcggtccgcg acgacaagga catgatcggc 300
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 cgtccagaca tccgagtcgg tcgctgt 387

<210> 3536
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-C2

 <400> 3536

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gtcctggccg ccacattagc gctgttcctc cgcgccgccg ccgcaacggc cgcgacggct 180
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 ggggtgtcct ccgtcggcta cggcgcgtca gaggagctcg gcgccttcg gattaacgcc 420
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<210> 3537

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-C3

<400> 3537

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 gcgctagtgg cggccaccgc cccacaggta gcggaggcac tgaagaagag agcggcggac 180
 agcggcgagg ctgcggaggc gattaagatc cagcacgact tctgctctac gctgtgcgag 240
 ggcaacaatg ggactgacct ggtcgtgtgc aaggagtcct gcgcgctctc ccagcagtct 300
 aacctggtgc tgtacggcac gatccagtgc acaggcaagt gcaccgatca gcatggcatc 360
 acagcgccgg tcatgaatgt ctgccaggag gagtgcgagt cggcgtagct ggtgaatgcg 420
 gccgatgtca cca 433

<210> 3538

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-C5

<400> 3538

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 acgagacggg ggtgcccag ggtaccacg agtacctccg ccccttgctc aagcagcagc 180

tcaagctctc caggtcttag tctgatcggc tccccccct ggaattctcc atggcggctg 240
ccttctcaga aaatctcacg cgacctccga atgaaagtga tgtaagctac taacgattct 300
tgttagagcc aggaaagagg ctctccagcc aattataaat ttattcctca agctctgagg 360
atcaagttca agctgtggat tatataggaa gcacgtttaa taattaataa agagggagag 420
gatgagcatc tctctgttg 439

<210> 3539
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-C7

<400> 3539

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gcgcggagga ggcggcggta gaggaggagg tggtaggct gtcgccggag ctggcgatgc 120
acggcgccat cgagccggtg gcgctgccgt cgtcgacgtc gaggcggcgg ctgtccatca 180
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acaaggacca ccaccatcac aaggtggagt cggaggacac gctgtggaag aagggcatca 300
tcctcgggga gaagtgcagg atccccgggg agcgggaggc ggagtgcgct gaccccgacg 360
acgacatcgc cgccgccagc ttccgccggt ccagctactc ccggcccgtg tcgcggtcga 420
gctcgttcgc catgcaccag 440

<210> 3540
<211> 446
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-013-Q1-E1-C8

<400> 3540

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taatgtggac accaccactt ccagtgttgt caacaaagat gcgaagcgca gcattagaag 120
tgtcgtaa tcttatatca agaacttcga tgcaaagtgc aacactggaa gcactgctaa 180

cagtgatgct agggacccat cagatacgaa atccagcact aaaattgtta gtagtgctga 240
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 tgataagagc aatgacaccg tcgatgctaa tgtgaaatcc aactctggaa ttgttgcaaa 360
 cagtgatgct agtaacaccg atgtacagac taacactgga agtgtcaaca acagcgatga 420
 ttacagcatt gactcanaac caaaca 446

<210> 3541
 <211> 452
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-D1

<400> 3541

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 ctctgtgtggg ggggggatct gcctttaaaa aggggttgat cccccgggca gtagacatgc 120
 ctctctcttc ttacgaccac cgcgcctttt cgccttcagg gccccagat ggggtgcgcc 180
 ggtgttctct ggaggggatcc gtgtcaaggc cgtctcttcc ggcgacttca ctgtcggaga 240
 gcgtgcgttc gtggtggtgt cgcgatctt gtcttcttcc tgccaccgtt ggaggggtgc 300
 aaccaatgg ggggtggcat ccttcacca ccattcggct tcaaggattt tcatcatgca 360
 gcccggtgc agtccccgt cngtggatc ccagaaggat gactaccagc cttgtggtgg 420
 ggagaagcaa accgggctgt ggcctcctc ct 452

<210> 3542
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-D10

<400> 3542

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 agttgagacc aacttggtct gaggctttga caagctgcta cttgacagcc tctacgaaga 120
 cgaggccagg aggcagcaga tcgccggcgc gacctacacc ggtagcctag gagcagccaa 180
 ccctttctgc accaatgcca gcgatccgtt caccatgtct agcagatttg caccaccggc 240

taatgtgcag ttggcactga tggctcagaa ccaacagcag tattaccagg cgcagcagta 300
 ttaccaggcg cagctgtatt tccagccaca gcagcagcag tattttcagc agcatcaaca 360
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<210> 3543

<211> 275

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-D12

<400> 3543

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 cacggcaaaa caccttcgcc ggcgagagca tggcgatggc gtaccgtgtc ctggagggtca 120
 ccctgggtgc ggcaaatgac ctcaagaaag tgctcgtctt ctcccggact cgcattctacg 180
 ccgtggcttc catctccgga ttcgacctcc gcatchcttc ccacagcacc caagcagacc 240
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<210> 3544

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-D5

<400> 3544

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 gatcccatct cctgctcaga gcctcgattc gaccggcggg ggcgacgatt cgaccgggtc 120
 ggtagccagg cagaggcagc ggaaggagag gatgagcttc caggacctgg aggcggggca 180
 cgtccggggg gcgccgctcg gcggcgcccg gaggaacggc aggggccccg cgggggcggg 240
 gggcgccggc gccggcgcggt cgcaggccgt ggcgtcgggc gtcttccaga tcaacaccgc 300
 ggttgccacg ttccagcgcc tcgtcaacac gctcggcacg cccaaggata cccccgacct 360
 ccgcgacagg atacataaaa cacggcaaca cataacacaa ctagtgaagg atacatcaga 420
 caagcttaaa cangctagcg agg 443

<210> 3545
 <211> 445
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-D6

 <400> 3545

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 tcctttttgc cttgttggcg tcggcggcga ccctgctcag cgtcggcgac gcgttggtcg 120
 tcgacggcct gcaggtgggg ttctatggca agacgtgccc ggcggccgaa ggcgtcatca 180
 gcgacatcgt caacaacgaa atcgctatgg accggggcat ctcccctggc ctcatctgcc 240
 tcttctttca cgactgcttc atcacgggtt gcgacgcttc cattctcctg gacgagtcgc 300
 ccgccggcga cgtcccagag aaggagtcgt ccgccaacgg cttcacctg gtcgggctca 360
 gaaccatcga catcgccaag tccaccgtag agggcatgtg ccccggcaag gtctcgtgcg 420
 cagacatcct ggccttcgcg gcgcg 445

<210> 3546
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-D7

 <400> 3546

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 tcccatgtcg gggatccgcg cgcggtacga cctgtacgcc acgtgggacg cgtgcctcga 120
 cctcgccagc cgccgcgtcg cgtactcttc cctcgggtgc gccttcgcgg gcctcctcct 180
 ctcccgatc cctactactc gctgggcata agttgccctt ggcgctggtg tggggatcgg 240
 ggctgcatac actgaatgct catacttatt cactggtgct ccagtctgtt caccctaaact 300
 atcacctatt ccctctgcac actctgatgg gggacatacg tatacacttg ctgttggtt 360
 ggtccaactc ggtggagttt gtgtatgtgt gaagtaacgg ttgtttcatg ctggatattg 420
 cgctacttct ggccata 437

<210> 3547
 <211> 454
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-D8

 <400> 3547

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 gttcaagccc gagctggagt cgaccaagga gctgaagcac gtgcaccagg ccatcaagtg 120
 gggcaccgac tacctgctga aatgcgccgc caggaagaac aagctgtggg tgcaggtcgg 180
 cgatcccaac ctggaccacc agtgctgggt gcggccggag aacatgaagg cgccgcgcac 240
 gctgtacgag atcgactcga agacgcccg gacggagatc gccgccgaga cgtcggccgc 300
 gttcgcgcc tcgtccatgg tgttccgcga cgacaagaag tactcgcgca agctgctgaa 360
 caaggcgaag ctgctgttca cgttcgccaa gagccacctg ggcagctacg acggcgagtg 420
 ccccttctac tgctcctact cgggctacaa cgac 454

<210> 3548
 <211> 445
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-E1

 <400> 3548

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 ttgggataac acaaaatctt tggttcatgg aaattccttc cagaagaaac tctcgtgct 120
 ttttggattg cgttctgagg gtgcacctan gagctctggt aatgggtggg caactcagag 180
 ggcattctgca ttagcagctc tatcatccgc attcaatcca tcatctcaac aaaggctgtc 240
 taatgagagg cctaaaagca caggcgatgg acccacgcaa cgtgcctcag cactggctgc 300
 cttatctaata gattcaacc catccttaaa acccaaaaca tcacctccat ctcgctcaag 360
 tcgaggttct caaagagcag ctgctgtagc tgctctatcc tctgtgctga ctgctgagca 420
 atctggatct tcagaatttc tacga 445

<210> 3549

<211> 366
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-E10

 <400> 3549

 gaattcaggg tgcaccacg cgtcagccca cgcgtccgct cctccatcac caccaccaag 60
 ctcaacaaca gccagctcgc gaaaataatg aagagccgca gcatggcatc atcggccgcg 120
 ctcttggtgc tagccctcgc gctagtggcg gccaccgccc cacaggtagc ggaggcaaag 180
 aagaagagag cggcggagag cggcgaggcg gcggaggcga agaagatcca ggacgacttc 240
 tgctcgacgc tgtgcgaggg caagaagggg acggacctgg tcgtgtgcaa ggagtcctgc 300
 gcgctctcnc agcagtccaa cctggtgctg tacggcagga ttcagttgca aggcaaatgc 360
 accgag 366

<210> 3550
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-E5

 <400> 3550

 ccacgcatcc aatggatgtg aatgtgagaa ccatgtggtc gtcgatgcgg gcacaggttg 60
 cgatggctgt ggtgttggtg ttcttggtga gcggcgcatg gtgcggtcct cccaaagtcc 120
 cccagggcaa gaacatcacg gccacctatg gcaaggactg gctggacgct aaagcgacat 180
 ggtatggcaa gccgacgggt gccgggtccc acgacaacgg tgggtggctgc gggtagaagg 240
 acgtgaacaa gcccccttc aatagcatgg gcgcatgcgg caacatcccc atcttcaagg 300
 atggtctggg ttgtgggtcc tgcttcgaga tcaagtgcga taagcctgtg gagtgtccg 360
 gcaagcccgt ggtggtgcac atcacggaca tgaactatga gcctatcgcg gcgtaccact 420
 tcg 423

<210> 3551
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-E6

<400> 3551

ccacgaatcc gagggcacct tctgctacat cgacccggag taccagcaga cggggaagct 60
gggcgtcaag tcggacatct actcgctcgg cgtgctcctg ctgcaggtgg tcaccgcgcg 120
gccacccatg gggctcacgc accacgtcga gaaggccatc gacgcgggca ctttcgcgca 180
gatgctcgac atcacctgca aggactggcc cgtcgaggag gcgctcggct acgcaaagct 240
cgcgctcaag tgcacggaga tgcggcggag ggaccggccg gacctcgcaa ccgtcgtact 300
gccggagctc aaccggttaa ggaacctcgg ccacgcgtac gaggcacgca tgagcgccgt 360
cggggccaac agtggaaagtg gcgaaagtaa tgaccaggtc agcgggagct cgccgacggc 420
gggtggttca tggagaacgg cgg 443

<210> 3552

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-E7

<400> 3552

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aggagagac cagcgccaac acctccggtt tcttgattgg gtggtgatcg gtgaaggaag 120
gagaaattaa gatgagcctc ttcgggcttg ggagcaagaa tcagaagacg ttcaggccta 180
agaagaatgc accgtctggc aacaagggcg tgcagctgaa gaaacacatc gatgcaacct 240
taggaagcgg gaatttgagg gatgctgtcc gattgccacc aggggaggat ctcaatgaat 300
ggctagctgt taacactggt gattttcttca accaggtgaa catcctgtat ggtactctaa 360
tggagttctg cacaccagct acatgcccaa caatgtcagc tggaccaaag tttgagtata 420
gatgggccga tggggtgcag 440

<210> 3553

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-E9

<400> 3553

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 cgtcgccttg gcgacttgta caaacaagtc tgttgatgcc cgcgtgggtcc accccatcgt 120
 caccctcgag gccgatggct catctccac ctctggcgat ggctcgcgc tgatcagctc 180
 caccaaccaa gatgaacttg gagcgttatg ccaacagatg cactacaaga cggttggtc 240
 cagcatgacg aactgcctg ggggtgactac gccagagcaa ctcttagatg catccctgcg 300
 gattacagcg gtgaaggcag cgatggcgga gatgaagcta gacaatgcaa taaaatcagg 360
 cagtgtcag ggtaaccgga tgatgtcgtc gctaaagaca tgc 403

<210> 3554

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-F10

<400> 3554

gaccacgcg tcagcccacg cgtccgcctc tccctcaatc taaggagagg agagatatgc 60
 agctcacgag ctccacaaaa tgctgacctc ccaaagctgt ggctcgcgatc caaacagaag 120
 ggaaatgatc aggcgacaac ccggcatgga tcggttcctg cagctgctgg ccgccggcgt 180
 ggccgtgcta ctgctagtgg caccgcgggc catggctgac gacgacattg tagaagtcgg 240
 cgtcaactgg ggatcgcagc tctcgcaccc gcttctcccc ggctccgtgg tgaagatgct 300
 caaggcgaac cgcacgcgca ggggtcaagat gttcgacgcc gactcctggc ccgtcggagc 360
 gctcgtcgac tccggcattg aggtcatgct cggcatcccc aacgacatg 409

<210> 3555

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-F3

<400> 3555

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 gcaaaaatgg cgtgggagat ccgccacctc acctctcca attctcgcgc tcgcgcctga 120

tatggaaggt ccgtcggagg gactcgggca tcgaggccat ggcggagccg cacccttct 180
 ccccttgcc tcgcgcgcgg cgcccgagat ggtgctgagc gcctgagcct gccctcctac 240
 gggctcactg gcacgtcttc cacggccatc gaattccaga gctgcgattc ccgaggccat 300
 ggagcagcag acaatatcaa ttgccaaagc tgccattaca atagtactca ttttagggac 360
 ttcagttctt gcagctgtca atccaattgc aggatgctat gacgctctta aggttcgtaa 420
 acatgtatctt attgatgcaa taat 444

<210> 3556
 <211> 455
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-F4

<400> 3556
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 agtacggcac caacatgggt ggtggagtga ctctaagaa aggtggaact gaacatttag 120
 ggctcccagt gtttaactct gtagcagaag ctaaggctga aacaaaagcc aatgcaactg 180
 ttatatatgt tccaccacca tttgccgcgg ccgctataat ggangcaatg gaggctgagc 240
 tcgaccttgc cgtctgcatt acagaaggaa tacctcagca tgacatggtg aaagtgaagg 300
 ctgcactaaa cagccagtct aaaactcgat tgattgggcc aaattgccct ggtatcatta 360
 agcctggtga gtgtaaaatt ggaatcatgc caggttacat ccacaagcct gngcgtattg 420
 ggatcgtatc tcgttctggt actttgacat atgaa 455

<210> 3557
 <211> 439
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-F5

<400> 3557
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 acgcaagggc gccacgccgc aggccttttgc atgccccgc gcgtggaaat tcgaatgcgc 120

agagcccagg cgccgcggct ccgtgtcggc ggcgttgccc agcgggccgc ctccgcctcc 180
gcttcctgt agcacgccgc cgtgcgcctg gaaatattca ttggcattgg caatgcaacc 240
acgatgacgc cctgcctttt tgacgcccc gcactgtctg ctggcgccctg gctggctgct 300
tcttcacacc acatctcgcc cggccccggc ctatctagtt cccatgcgtg tagagatggt 360
gttactgctc ccgctggccc atgggcccgc atggaccatg gggatgcana tgcaattgtg 420
gccagcgatg cgtgcgtac 439

<210> 3558

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-F7

<400> 3558

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acccggcggc ggcgatcgat ggctccgcgc agctcatcgg cggcgacgtg cctgtgcctc 120
gctctcgccg cggccacgct ggcgctggcc caccggggcg aaggaggagg accatcggca 180
tcggcggcgg acctggacaa ggtcacggcc gagaccttct tggacatcga gatcgacggc 240
aagcctgcag gccggatcgt gctgggactg tttggggaca ccgttcctaa aacagcagag 300
aacttccgag cactttgcac aggggagaaa ggaattgcc aatccggcaa gcctctgtgg 360
tacaaggggt cgacgttcca caggatcatc ccggggttca tgatccangg aggcgacttc 420
accaacggca acggcacggg ggg 443

<210> 3559

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-C7

<400> 3559

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gatgaagaag atcgctgcg ccgtcctcgt cgccgcctcg gccaccgtgg cgctggccgc 120

ggaggcgccg gctccgtctc ccaccagcgg ctctcccg gtcgcacccg ccacgtcgg 180
 ggccgccgtg gcctccttct tcgctacta cattcactga gccgccggac gaggagccgg 240
 agccggaggg aagagaccaa ggtgggggga gagacttggc tgcgctgcgc tgctctgctg 300
 ctcccgcgca ttcccgatgc gtgggctgc tctgattggg cacggcgggtg gcagtggcac 360
 accttcgtct tccttttgtt tgtttttttt ccttcctctt tctacttgat ttccatttaa 420
 cgaattggta tcgctgatgc accagtttaa t 451

<210> 3560

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-C8

<400> 3560

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 aagaaataaa aaaaataacc ggccgcatca gcgtcggctc ctcggacacc tgtggctctg 120
 tccgcggatc gcgccagatc catcacgacc agcgggtcca ccgcggtcgc agtcgcgac 180
 gtccgtgctg ccttggactc cttcgtcgtt taccacattc actgacttgc cggactatga 240
 gcctgagcca gatggaatag acgcaagtag ggggacagag ttggctgcgc ttagctgttc 300
 tgcagctcgc gcgcattccc gaaccctcgg cgtgctccca catgacacgg gggtagtagt 360

<210> 3561

<211> 467

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-C9

<400> 3561

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 catacaatgc gatgagagcc ttgttctctc tggctctctt ctgcatcgtg catggtgaga 120
 aggaagagtc aaagggcatc gatgcgaaag cgtccgggcc tggtaggtcc ttcgacatca 180
 ccaagttggg cgctccggc aatggcaaga cagacagcac gaaggctgtg caggaggcat 240
 gggcatcggc gtgcggcggc actgggaagc agacaatcct catacccaag ggcgacttcc 300

ttgtcggaca actcaacttc acagggccctt gcaagggcga cgtgaccatc caggtggatg 360
gcaatctgct ggcgaccacg gacctaagcc agtacaagga ccatggtaat tggatcgaga 420
ttctacgcgt ggataacctg gtcacatcgc gcaagggaaa ccttgac 467

<210> 3562

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D1

<400> 3562

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tccccgcggc ccgcgtcgag gaagaagaag ggataggaga cggggacgga gacggagccg 120
gtggtcgcaa ggatggccgg gggcatgcag gcggcggacg cggcgggccc gctgagcgcg 180
ctgctctcgc tgcctcgctt gcgcgggttc ctgcgcgtgc tccagccgct ggccctgctc 240
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tccgatgccg ccacggcctc gcgcgcgggg gccagcggga ggaaggggaa ggcgctcgctc 360
tcgtcgctccg tggttctgcg ggtggccggc gggccccca tggctcgccgc gcggaagcag 420
gcgtccgcgc gca 433

<210> 3563

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D10

<400> 3563

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cgatggcttc aggcctcctc gttctgctgc ttctcatcaa cacaggcttt gtcctgcccc 120
tccattccga ggactgctgg gccgacaccc gcgtcatctg caccaagacg cacaactgcc 180
gggacgacac ttgcgcgggg gcgcggcatgc cggacggccc ctgccactgg gagttcccca 240
acctggtgcc cttctgccag tgcctgcgcc ccaactgcca ctagtccggg cgctcgggat 300
tggtcactt cgccggcgat gatggatggt gcccaactgc gactgcccag tctgctccat 360

tcgttgttgt ttaaggcata atatataaac tgccaaattc acatgtattt tgggatattt 420
gttatcatatc tatgaaatga ctgtga 446

<210> 3564
<211> 462
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-001-Q1-E1-D11

<400> 3564

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gagggcagga gcagccgcag tcccggcgat cccgccgccg gtcgccctca cacctcctcg 120
tactgcctt cgtttctctt tccaacaatc aagatgagcc gtggcggtag cgcggtggt 180
ggtcaaagtt ctctgggtta cctctttgga agcggtgagc cccccaacc agcagtggca 240
ccaccagctg taagtgtcc acctgtgtc gcaggtgtc cacctgtga gaaaccacct 300
gctgcaaagc ctgatggcac cagtcagatt gctgtgtggg ttaccagcca aaccaataac 360
tatcacaggg ctgacggtca gaacaccggc aacttctta cggaccgcc ttcgaccaag 420
gtccacgctg ctctggcgg tggtcttcc ctgngatacc tg 462

<210> 3565
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D2

<400> 3565

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cctgcctgag ctaccgcac ctgcctcct caccgcgttt cctccgttaa tccggtagaa 120
aatggccgat gccgaggata tccagcccct cgtctgcgac aacggaactg gcatggtcaa 180
ggctgggttc gccggcgacg acgccccgag ggccgtcttc cccagcatcg tggggcgccc 240
gcgccacact ggtgtcatgg tcgggatggg gcagaaggac gcctacgtcg gtgacgaggc 300
gcagtccaag aggggtatcc tgaccctcaa gtaccccatc gagcacggga tcgtcagcaa 360
ctgggacgac atggagaaga tctggcatca caccttctac aacgagctcc gcgtgggtcc 420

cgaggagcac cccgtcctcc tcaccg

446

<210> 3566

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D3

<400> 3566

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atgtcgccct tctacctcgc tcgcggtgct tccaagctag tgagaaggat tacctcggag 120
acatcggtcg agctcaagat tctatctgat aaatggcggc ttctcctcgc tggcctcatt 180
ttccagtaca tacatggttt ggccgctcat ggggttcatt atctgcaccg gccgggacct 240
acccttcaag atcttggett catgattctt ccggagcttg ggaaagaaag gggttacatc 300
agtgagacat tgtttacatt cgtcttcttc accttcgttt tgtggacatt tcatectttc 360
atccttcaga ctaaacgctt ctacactgtt ctgatatggc gcaagggtact tgccttctta 420
tgtgcttctc agtttcttcg aataataa 448

<210> 3567

<211> 436

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-001-Q1-E1-D4

<400> 3567

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gcgcacgtcg ccccggggct cagctcacc accgagcccc aaccaattaa taatatatat 180
atatagctag gatcgatcgt cagtaaaatg gcaggctccg ccgtcctgag gagccccctg 240
tccgtcctcc tctacatcct cgccgcggtg cccgccaccg ccgcggcgac gccgaccgac 300
gccgccatcg acgaggcgta cgcgcattct gtcaacctca ncgctaacca ggagtactgg 360
gcggagcgcg cggaggcggc gcacgcgtac aaccgcgcgg cgttacagac cgacccccgtg 420

<210> 3568
<211> 350
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D5

<400> 3568

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gtcagtccta ttggttgaga gagcatgctg gatcttcggc catatgctgt aaatcgcttg 120
ttaatttttg ttctactagt acacgaagaa atcaaggaaa aaaaaccttg actacgggaa 180
gaaaatcacg gccacagggg tattttaacc tccttcctaa tgcgcatata tctatcgaag 240
ttgagtaaac tttgatataa tgtattcatg ggtcacgtcc aaccaaccct gtgattgggt 300
gcttgtaa at ttttgtggcc ttaatcatgg cttcaatgat gtccttcgtt 350

<210> 3569
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D6

<400> 3569

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ggcgaagggg tgagatggat cggcgggcca tggccgggga ggagctgggg aggatgacgg 120
tgcgcgggag caggatgcca tcggcta atg tggtagcgac gcggccggat ttggaagagc 180
gcagctagca cgccgccgta gcggtacgct agctcctctc cgagtacctt gcaccaaccg 240
gggggtctgg ctctcaact gatggcaacg gggagttccc ctccggaaat atctcaccgt 300
ctccgtccac gcgacgaatc aacttcctg catggatgct atgaacgctt tgctaggaat 360
atttcttct tctctctgtt cctcgctgcg ataaatcccc aacggga 407

<210> 3570
<211> 460
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D7

<400> 3570

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agccgtgctg cgcgacgggtg aagccgggtgg cgacgacgag gcacaggcac gggcacgggc 180
acgggcacgg gcacgcaggc gcggggaagc ccgggacgct aggaggcgac aagcagggtta 240
aggactgcca tggttgctgc cagaaggaga gcaagccgcc cgaggacgcc gtcgtgatcg 300
ccattccggg acgggccgtg gagcaccgga aggaggcctt ccctcacgag aacgcggggag 360
ccgggggggtg ctgcgctgca ggcgacgggtg ccgaagacga ggtatgcatt gtcacgagcg 420
ccaggtcgcc ctgctgcagc accgcgagga gtcggtctgg 460

<210> 3571

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D8

<400> 3571

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atcggtcgac gagggctgca cgaacgatgg ggtccgcctc cgcctcagtg acgacaacca 120
gcctgctggc gctggcgctg gcagcgctgg ctttcgtctc cagggccgcg gcgcagggca 180
acggctgttc cagcgtgatg atgaccctgg ccccgatcat ggacttcac tccagcaagg 240
cgtcggagcc ggggatctcc tgctgctcgg tgctggccgg agtcgtgcag accgaccccc 300
gctgcctctg catggtactg gacggcactg ccacgtcctt cggcatcgcc atcaaccaga 360
ccagggcgct ggagctcccc ggcgtctgca aggtcaaggc gccgccgctc agccagtgca 420
c 421

<210> 3572

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-D9

<400> 3572

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gaaattataa tgccgatcgt gaccaagctc cttactgtc tctgtgtccc atacgtcctt 120
gcaaggggca tcttcccgtt gctgggttac cactcatcg tgaactcagc ggtgtaccgg 180
tttgctggc ttggaagcct gatcttcagc gcactcttct tttggggcaa gagatttcat 240
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ctgcacaact ttggcgagga ctcaactca cctgagcgga gtgaatctgg agcaagtata 360
gggtcagatg atcaggacag agatattgta ctgcgagatc aggaagagga agtgggggtt 420
aggatgaggc gcaataatat gcat 444

<210> 3573

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-E11

<400> 3573

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ctcaagatcg ccgaggagaa ggccggcatc gtgcccatca cctaccgcaa ggtggcggtgc 180
gagaggaaag gcggcatccg gtacacgata acaggaacc agcactacag cgaggtgaag 240
gtgaccaacg tgggcggcgc cggggacgtg gtggcgctgt ggggtgaagg caacaagcgc 300
gtcaagtgga cgccgatgaa gcgcagctgg ggccagctct ggaccacgga ggtcgacctc 360
accggcgagt cgctgacgtt ccgcgtcatg accgccgacc accgcaaggc tacctcctgg 420
cacgtcacgc cccgcgactg gcagttc 447

<210> 3574

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-E12

<400> 3574

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catggaggac tccggccagt tcactgactg ggcgatggct acgctgcagc acgatgagga 180
ccaggcagtg gactacccca tcgacgacgg ccgcggcggg gctaccttcc cctcgctccg 240
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aaacagccgc tgcgccggcg acgggggcac cgcagccga ggcaataata tctcaggaac 360
cgcgccaaga agaagcagca gtggtagtgc cgtaatccag cccttgagggt ggaatttttg 420
cgccggc 427

<210> 3575
<211> 442
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-001-Q1-E1-E2
<400> 3575

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gcggcagccg gaacccccacc atcatcagcc agggcaaccg cttccgcgcc gtcgacgaca 180
gcaggttcaa ggaggtgacc aagcgggagt acacgcagta cagcgagtac aagaactggg 240
tgtggaagtc gcaggacgac ctgttctca acgggcctt cttcaaccag tccggcggcc 300
agaacgagcg caagtacgac aggtctgacc tcattcaggc caagggcggc cagtacgccg 360
agtcgtcac caggtacgcc ggggcgctca actggcgcgt cggcaggaag tgctagtgcg 420
tgtgcaactc taggtgcag ct 442

<210> 3576
<211> 396
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-001-Q1-E1-E3
<400> 3576

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 tgcgacgccg ccgtgcacgg ggctaccgag gcggggggcg tccaccccg cgcccggtc 180
 tgcgacgcgt gcggcgccgc gccggccgcg ctgcgctgcg acggcaccgt gacgctgtgc 240
 gccgtgtgcg tcggccgctg tgctcccggg gtgaccgcga cccgcgtggc cacgttcaac 300
 ggctgttccg gccctgctga gatgggtggg ctcatttccg ttgaccacc gcactctggag 360
 caggactttg aggcctgggt cgcagacaag ctcccc 396

<210> 3577
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-E4

<400> 3577
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 accaacggca acggcacggg gggcgagtcc atctacggca gcaccatctt ctccgacgag 120
 aacttcaagc acaccacgc taaagccggg acgctgtcca tggctaacta cgggcccgc 180
 tccaatggct cccagttctt catcaccacc gtagacgaaa accggttgcc caagaagctg 240
 gacgggcgcc acgtggtggt cggcaatgtg gtgaaagga tggacgtcgt gcgcaagatc 300
 gaagccgagg gccagctcac cggcgtgccc aacgccaacg tcgtcatagc caacatcggg 360
 cagctgccag cggccgccc cgcgggccat cgtgacctct gatcgatgac gacgagaacg 420
 actcacgatt catc 434

<210> 3578
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-E5

<400> 3578
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 tctgcatcgt gcatggtgag aaggaagagt caaagggcat cgatgcgaaa gcgtccgggc 120
 ctggtgggtc cttcgacatc accaagttgg gcgcctccg caatggcaag acagacagca 180

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-F12

<400> 3583

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catcgaccac gcccccttcc aggcctcccg ctccatgggt ctctctcaa acaggattgg 120

gagggagagc ctcaaggcgg gggatcatat ctactcctgg agggcggcgt gggctctacgc 180

gcatcagga atatatgtgg gcgatgataa ggtgatccat ttcacaagag gaagaggaca 240

ggaggtctga acaggaactg tcgtcgatat tattcttctg agttccaccc catcacgaag 300

caacacgcct tgcccgggtg gcaccgacga aaccagcgac agcagcacag agacgaacgg 360

cgtggtatcc tcctgcctca gctgcttctt agctgggggt gctctctacc gtttcgagta 420

cgcagtcaac ccggcgctct t 441

<210> 3584

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-F2

<400> 3584

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tctgaaagac aagaactacg gcaagctcgt ggacgcgtcg ctgaaggagc acaaggaaag 120

cgagctggag gccgtctgcg aggtgatecca agagtgcac gaccctgacc cgacgcggcg 180

gccgtcgatg agagacgtcg tgggcaagct gcgagacgct ctcgcatct cgcccaggc 240

ggcggcgccg cggtctgcgc cgctctggtg ggaggagctg gagctgctgt cggtgaagtc 300

aacctagtgt ggagaacgct gtgtatactg atactgtacc aacatgttcc aacgctcctc 360

tagctgagct ctaacaggat tcgtataggg gcttcaattc gtgctgctga tgctaca 417

<210> 3585

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-F3

[illegible]

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<210>      3586
<211>      390
<212>      DNA
<213>      Zea mays

<223>      unsure at all n locations
<223>      Clone ID: LIB148-001-Q1-E1-F4
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gtactggaag	gcactgccac	gtccttcggc	atcgccatca	accagaccag	ggcgctggag	180
ctccccggcg	tctgcaaggt	caaggcgccg	ccgctcagcc	agtgcacagg	cgccccctgcg	240
gcacctgcac	cgacgcctcc	cgacgagcca	gcagcggcag	ctgaggaaga	agccgacgca	300
gctgcagatg	ccccttcagc	anatggagcc	tcaagctcca	caaactcaaa	gaatgcagcg	360
agcttaactgc	gtctcatctg	cgcattgctg				390

<400>	3587
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1548

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 gcgctggcgt cgggggtgct ggtcaccatg agcggcgggc cgcggtaccc gattccgctg 360
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<210> 3590

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-F8

<400> 3590

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 gacattgata ggcttctctg gaggtgcgtg tgagcagctc ggaggtcagc cgccgagaag 180
 agtcatagg caatggcaac cgcaaggaag gatcctcagc aggttgataa agtcaacctg 240
 aaaccagcgc agtctggcaa aggggtagta cggcgtgcaa ggtctgtccc gacctctccg 300
 gatcgagat cgtccccatc cccggccccca gtctcagaca acgcccagcc accggcatca 360
 tcaactcaaca ctgcgacgac ctgcgtcccg tccacaacaa catctagctc ggcggcctct 420
 tcaagccacg ggaagacgat gcgctccgc 449

<210> 3591

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G1

<400> 3591

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 catatgctgt aaatcgcttg ttaatttttg ttctactagt acacgaagaa atcaaggaaa 180
 aaaaaccttg actacgggaa gaaaatcacg gccacagggg tattttaacc tccttcctaa 240
 tgcgcatata tctatcgaag ttgagtaaac tttgatataa tgtattcatg ggtcacgtcc 300
 aaccaaccct gtgattgggt gcttgtaaatt ttttgtggcc ttaatcatgg cttcaatgat 360

gtccttcggt

370

<210> 3592

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G10

<400> 3592

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gttcctttta gcgctcttct gtgtcgtgca tggtgagaat gcaaagtcaa aggacaacga 120
tgcaaaagcg tccgggcccc gtgggtcctt cgacatcacc aagttgggcg cctccggcaa 180
tggcaagacg gatagcacga acgctgtgca ggaagcgtgg gcatcagcgt gcggcggcac 240
cgggaagcac acgatcctca tccccaggcg cgacttcttc gtcggaccac tcaacttcac 300
atgcccacgc aatggcgacg tgaccatcca ggtgaatggc aatctgctgg cgaccacgga 360
cctaagccag tacaaggatc atggtaattg gatcgagatt ctacgctggg acaaacttgt 420
catcacccgc 430

<210> 3593

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-001-Q1-E1-G12

<400> 3593

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cgccgcccga tggacaacca gcagaacatc gcgaccgcgc agggccgcgc ggacgcgcgc 180
gaggccacgg ggttcgtgct ccagaagtgc gagttccagg ccgaggccgc gctccgggac 240
tccgggcgcc cgcccatccg caactacctg ggccggccgt ggccgcgagt ctcgcgcacc 300
atcgatcatg agtcggagct cccggacttc atcgacaagg cggggtactt gccctggaac 360
ggcgactttg ggctcaagac gctgtggtac gccgagttcg gcaacacang gcccggcgcc 420

aacacggccg ggcgcgtcag ctg

443

<210> 3594

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G2

<400> 3594

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tacaactcca tcatgaagtg cgatgtcgac atcaggaagg acttgatgg taacattgtg 180
ctcagtgggtg gcacgaccat gttccctggt attgctggacc gtatgagcaa ggagatcact 240
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gtctggatag gaggatccat ccttgccctc ctgagcaact tccaacagat gtggatctca 360
aaagctgagt atgacgagtc aggacctgcg attgttcac ggaagtgtt ctaagctctg 420
ggtccccctt cggc 434

<210> 3595

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G3

<400> 3595

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gcaaaggccg gacctccatc tcccacgagt ccgcctcttc cgacaacgcc gagtccgccg 120
cgttcaccgt gaactcggac aacgtcatcg tcttcggcgt cagcttcagg aacagcgccc 180
gcgtcggcct ggtgaacgac ccggagatcc gttccgtggc ggcgatgggt gccggcgaca 240
aggtggcctt ctaccactgc gcgttctaca gccccacca gacctgttc gacagcgccg 300
gccgccacta ctacgagagc tgcgatatcc agggcaacat cgacttcac ttcggcagcg 360
gtcagtctat cttccagtgc cccgagattc tcgtgatgcc tgaccggcgg acggagatcg 420
gcagctccat catcgcgcat gtgc 444

<210> 3596
 <211> 472
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G5

<400> 3596

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ctgccactcc gccatcgcg ccaccaagct gaagattctg cgccgaggag gccgggggtgc   180
cgctgccgtc ctccccgtca ccaaccacga cggcccgtgc tgctcctccg accacggcag   240
caaggagaag aagaagaaaa agaagggcgc caggaagggc aggaacgcg cctccatcct   300
gggcgacgcc ggcaccttcg acccggactt ctgcggcgcg taccggctcg gcgcggagct   360
cgggcgcggc gagttcggcg tcacgaggcg gtgcgaggac gccgccacgg gggaggccct   420
ggcgtgcaag acgatccggc ggaagcggct gctcctgcgc ctgcgcgggc gc           472
  
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<210> 3597
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G6

<400> 3597

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ccgcctccgc ccagcttggg ggtgtgcgcg gcaaggaaga gacatcgacg tcggcgccag   180
ctttcgcgcc ggatagcaac aagaaaaggt ggaggaagag gaggttctgg agaaagaaga   240
tgaaggccag gaaggagatc ggcgggctgg tggacctcgt caacgatatt tcggccaagt   300
cagaggagag cctaagggtt agcaacaaaa acatgcccag cagggcgctg acgttcagtc   360
agctgagcgc cgcaacggac gggttcagtt cgcagaacct gct           403
  
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<210> 3598
 <211> 356
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G7

<400> 3598

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cactcgcgta cacgcgcata aagtatcgct ccagaaacac tatggcgcg cagtcacccg 120

tccgcctcag cgcagcgctc ggctcatgcc gcatggcgcc acaagccgcg ggtgtccacc 180

actgctgtgg ccgcgctcga gtaccgacct cgcgacctga ctgggagatt caggtcacgt 240

gcgatgacgc gaagatacgc gatgcgctcg atgctgcata tcatcaccgc aatttgcgcc 300

acttcaaagg agaacctacg ggttacgacg aagagcatgc cgagcagggg cctgac 356

<210> 3599

<211> 111

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G8

<400> 3599

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acggtcccat cggtaggtca cacgcgtaca cgcgcataaa gtttcgctcc a 111

<210> 3600

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-G9

<400> 3600

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acgacaagat caacgagaag atccatgagt ataagcactc gtcgtcgtcc tcctcctctt 120

cggactcaga cgatgacaag aagcccaaga agtctaagaa gaagaagctt tttggaagaa 180

aacatccatt gcatcatgtc ctcggaggag gcaaagccgc cgaccttggtg ctgtggagga 240

acaaacaggc atctgggagc atcttggtag gggtgaccgt gatctgggta ctgttcgagg 300

gcatcggtca ccacctcctt accttccttt gccacgcact aattgtgttt ctcaccatct 360

ggttcacatctg gtccaatgct gcgtcatttg tcaacaggtc acctccaaag ttcccagagg 420
tcat 424

<210> 3601
<211> 464
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-H1

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aggggacgca cgggcaggca gccatgaacg gcatcaacct caacggcggg ttctgtctgt 180
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aggaggagga cctcgaggag gcccgcgct ccttctcccg cccgatccct gactactact 360
acgaccggtc cggtctctcc gcctccgtcg ccaagatgtg acctgaccga accgcgcctc 420
tctccgcca agaaatgcgt ggtgatacca atcgtttctc gatc 464

<210> 3602
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-H10

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cgctggccaa tgggacgccg tcggcgctgt tccggctccg caacgggagc ctgaacgcgg 180
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ccaccgtcgg cgctacgtg cccgacggcg ccgcgggcct ccgcttcgag gacttcgaca 360
agctccaccg cgcgtcggg gacgccttct tcggcgact gtgatgccag gacgacgcca 420

ccgcc

425

<210> 3603
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-H11

<400> 3603

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tgctgctggt cgcaacggtg tcgcctgccg cgcgcgcggc ggcggtggcc gtggcgggag 180
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gcaagtcgga cagcaccctg atgacctca acgcgtggaa caacgcgtgc gaggcgacgg 300
gggtacatca gatcgtcac gcgcgggca actacctgac gggcgggctg gaactgaacg 360
gccctgcaa gtcctccatc agcatccgtc tcgacggcaa cctgctcgga accggagacc 420
tcagcgcgta c 431

<210> 3604
<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-001-Q1-E1-H12

<400> 3604

cggaagccc gggtcgaccc acgagtcgg tcagatcttc caaagataaa ccagccaacg 60
ctgatcattt ggggggagca ggatcaggtc ttcccaatgg agctggcgca taggttgag 120
aggcatcttg gggagagttc tagattagta gtcgtaaaaa acgctgggca cgcggccaat 180
ctagagaagt ccaaggaggt gtgcaagagc atcattgact attttcagga accgggttca 240
agtgattgag ttgggggggaa aggatgtgaa gccacaatgt gacggttgga aattctgagc 300
taggacatcg tcctgtgatt ggcccgcagt ttgcccgtt ccttggaac ttgtaattgt 360
aacaaaagaa cctttgtaac cacacggacc atacaagtct cctgtaaatt gtctgaaggc 420
tttctgcgct caaagaaaca cact 444

<210> 3605
 <211> 426
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-H2

 <400> 3605

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 gccaaaaaca atcctgacaa ggtggccact ctaatactgg aaaatacatt tacatccata 120
 ctggatatgg ctggtattat gcttcccttc ttaagatggt tcataggcgg gagctcttct 180
 aaagggtccaa aactttttaa ctgtgttggt cgctctccat ggaatacact tgatattggt 240
 ggagaggtca aacaacccat tctcttcttc tctggattgc aagatgaact agtccccctt 300
 ccacacatga agatgttata tgacaaagct tctgatcata acagaaattg cagatttggt 360
 gattttccta gtggtatgca tatggatacc tggatgtctg gaggggaccg ctactggagg 420
 acaatc 426

<210> 3606
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-006-Q1-E1-G10

 <400> 3606

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 aaaagtgaag tcgtactttt ggcgagacac attttttttt gaaaccaaga acaagaagct 120
 aaacctgaaa ttccgtgtta gcagtaacct gatcaagtta cactacaact agcaatacag 180
 attttttctca agccttggtc acatatatat tcaagtgcaa aaaggagatc gatacaacac 240
 catccccggt cttacaactg gcaggccggc caacgcgcac gcggctagt cccgtgcttg 300
 tgcgcgtgct ccggctgggt gacgacgacg aagatgttga gaacgttggt gacgaggcgg 360
 tatacgttcc gctgcatggg caagaagggg gacctaatacg ccgggaagtc ag 412

<210> 3607
 <211> 442
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-006-Q1-E1-G11

<400> 3607

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aacagggtctg aagagaagcg ctcgacgtgg tgcagggtctg tcatattctg tgggtgtagtt 120

caagcataag ccattacagg gaggtctcgtc ttcaggatgc aagccttttc attatgatga 180

aggcatacga gatgaagggtg taatctaagg atgacatgaa taaacgccga agctaccgcc 240

agatcgatag cttcgggtca tgatgaagat gaagtatgat ggtgatgctg accgaagggg 300

aaaaaagact atttagtcct taataatttg tattttgatc ataagtaaatt attggggata 360

taaatgtact tttacctgng cttggggtgc gtcncgtgcc tataaatagg tgaacggtag 420

caacatactg ttcacactga tt 442

<210> 3608

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-G12

<400> 3608

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tcttcattag cagcctaact tgtaatctgc aggatctaag caaagacttg atttagttat 120

ggacggattg gtaggcctct tgaaagtctg cgtgggtccgg ggtatcaacc ttgcctaccg 180

cgacgcaaga ggcagcgatc caaactgaag acaagcgtga agaagagatc cgtgaacccc 240

atatggcaag aggagctaac tctgaccgtc acagatccca gcccaaccact gaagctggag 300

gtgttcgaca aggacacctt cagcagagac gaccccatgg gagacgcgga ggtggacgtg 360

gcgccactga tggaggcggg gagcatgaac ccgcgggagg agagtctgag gaacggcgcc 420

a 421

<210> 3609

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-G5

<400> 3609

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tcacgattga ttcaggtggt ttcctttgtt ttgcgtgttt ttttttcttc ttctttttat 180
cgctgagccg atatatatgc actggttctc ctctgaatat ggggtgcctt caccaggact 240
caatatgtgt aattcttttc tgtttcctgg tcatgattgt ctgtaaattg taaacattgg 300
gtttgatgga tatcgacact ggagtgtaaa gtgttggcgg ttaaatacac ggccctcttt 360
cctggctcag caaaaaaaaa aaaaaaggga gagaaaagaa gggcgggacc caggac 416

<210> 3610

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-G6

<400> 3610

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cgatgcgggc acaggttgcg atggttgtgg cgttggtgtt cttggtgaga ggcgcattgt 120
gcggtcctcc caaagtcctc ccaggcaaga acatcacggc cacctatggc aaggactggc 180
tggaagctaa agcgacatgg tatggcaagc cgacgggtgc cgggtcccgac gataacgggtg 240
gcggctgagg gtacaaggac gtgaacaagc ccccttcaa tagcatgggc gcatgcggca 300
acatcccat cttcaaggat ggtctgggtt gtgggtcctg cttcgagatc aagtgcgata 360
agcctgtgga gtgctccggc aagcccgtgg tgggtcacat cacggacatg aactatgagc 420
ctatcgggc gttacacttc gat 443

<210> 3611

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-G7

<400> 3611

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 cctcattaca atccttcaag agagcagcac tacactacac tacattagag agaggtcgag 120
 cgccccctct ccgatccgcc ggcccgcgga gagctagctg ctgatcggtc gaggagagtc 180
 atggcgacgt cgacgatgcg cgttgccgcc ggcgtgctgc tggtcgtgtc ggcgctggcg 240
 accttgcccc gggccgagga cccctacctg ttcttcgagt ggaaggtgac gtacgggacc 300
 aggtccctgc tgggagtgcc ccagaaggtc atcctcatca acggcgagtt ccctggcccc 360
 aggatcaact gctcctccaa caacaacatc gtcgtcaacg tcttcaacca gctcgaccat 420
 ccgctcctt 429

<210> 3612
 <211> 441
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-006-Q1-E1-G8
 <400> 3612

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 aggggaaggag ccattcaggt tgcctaccgt cagctgcctg acattaggaa gaccgaggtg 120
 gtagaacgta catgaccccc gcgtcgtcag ggaagtatat ggattattac agggggcttc 180
 ggcttcggca taaaggctct ctcttatggc aaagacatac aatgtgaaga tgtaaccgga 240
 aggtgataag aatggtcacc gaagggtgtag ccgaaagagc ttcggcttaa tatgatgacg 300
 aagaccaa atgatgctga ccgaaagggg gaagaagact atttagtcct taatgattca 360
 tgttatgata ataaatagat gtcagggaca taaatgtact tttacccggg ttgcatctcg 420
 tgtctataaa tagatgaaca g 441

<210> 3613
 <211> 208
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-006-Q1-E1-G9
 <400> 3613

ccacgcgtcc agacaacatc catgttctc ctgggcgtcg tctgaatcat gcatgacgac 60

aaggaagatt catcgggcat caatgcgaca gcgtccgagt ctgctgggtc gttcaagatc 120
 accacattgg gcacctccgg aaatagcaag acagagagca ctaaagctgt gcaagaggca 180
 tgggcatcag cgtacggctg aactggga 208

<210> 3614
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-006-Q1-E1-H11
 <400> 3614

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 aggtcctagc ctgcacagat atagaccacg agcaagcatc ctacacttca tatgacggaa 120
 ttctgttcaa agctgatgca ccacaccggc aacgagctct tgcagcggac gcaataacct 180
 gccggaaatt cgccgagcgg gcttacaagt acagaccact caaagttgtt gagtttgatc 240
 ggccctaccc acagtgcata gcatacttgg atctcaagcg cgacgagtgc tctcgactct 300
 ttcctgcagg gcggatatac tcgcaagcct tccaccttgc agggcaggggt ttcttctct 360
 cagctcactg taacatggag cagcaaagcg cgttctactg cttcgggctc ttctgngga 420
 tgcaagag 428

<210> 3615
 <211> 405
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-006-Q1-E1-H2
 <400> 3615

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 gcacaaccgc tgcccgtcg ctgaaccatg gcgggctccg cgggtggccgt cgtcctcctg 120
 tcggccgtcg cgctgctctg cctgtaccac ctcttttcc tctccctgtc cgtcccggac 180
 ccggcagcag cagcagcagc cgtccccgc gcgcgcggtg gccaccgtgg cagcaacggt 240
 ccgtccgggt caggaaccgc caacgtcgtc ctccgcttcg gcctgtccgg gcagccgctc 300

cgctccacg accccgccgc cgccgccggc ctcccgaca tcgacacctt ccgcggaag 360
ctcgagcggc tgctttcctc ccgacgacca cgaaccggg ctggt 405

<210> 3616
<211> 361
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-006-Q1-E1-H5

<400> 3616

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ggcgtggtcc atcaaccagt gcaggtcctt ccgctggaac ctgacggcga gcgcggcgcg 120
gccaacccg caggggtcgt accactacgg ccagatcaac atcacccgca ccatcaagct 180
cgccatgggc cgcggaagg tggacggcaa ggagcggttc ggcttcaacg gcgtgtcgca 240
cgtcgacccc gagacccccg tcaagctcgc cgagtacttc aacaccaccg acggggtgtt 300
ccagtacgac atcatcggcg acgttccgcc cttcaagtgc ggccccaaca agattggccc 360
c 361

<210> 3617
<211> 421
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-006-Q1-E1-H7

<400> 3617

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aaagatgaag aaagtggcat catcgtcagc cgttctcttc gtgctagccc tgacgctagt 120
ttgtgccccg ctgatagcag aggcaaagaa gaagagagtc gccgccgccg ccgccgagga 180
gaagaagggtg caggacaact tctgctcgac gctgtgagag ggcaggaagg ggatggacct 240
ggtggtgtgc aaggagtctt gcgacctctc acagcgctcc aacctggtgc tgtacggccg 300
gattcagtgc aatggcaagt gcnacgagca gaagggcatc acggcgccgc atatgaaggt 360
gtgccaagag gcgtgagaca aggactacgt ggtcaatgcg gctgaggtca ccaaggcctg 420
c 421

<210> 3618
<211> 406
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-006-Q1-E1-H9

<400> 3618

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aaagatgttc caggggtggaa ggttggcgag agtgtgtaca attccgggaa atggatgccc 120
ccggctaccg gtgagctccg ccctgaggtg tggtaagggc ctgttgtagg cattgagaat 180
gcaatcatgt catgaggggca tgaataaggc ttccagacat gggcatcctt ctttgttcac 240
taaggatcag ctgttcanat acctgtatct attttgctct tatgaaatct ggctgggttaa 300
taatatgaag ccgacgcttt gcctcatcta tgctcgtgca ttgatgtaac gtgtccttgt 360
ctgatattaa gaaaatatgg aatataagaa agaaaaaac gcctgc 406

<210> 3619
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-A1

<400> 3619

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gcgatgctgg gcggcgggca cagcatcggc gtctgcaggt gcttcttcat cgagaccgac 120
gcggcgccca tcgaccccaa gtacaagaag acgatcagcg acgcgtgcga cggcaaggac 180
tcgggctccg tccccatgga ctccacctcg cccaacgacc tggacgggag ctacttcggc 240
ctggtgctgg agaagaagat ccgctcacca tcgaccgcct gatgggggatg gacaagaaga 300
cggagcccat agtgaaggcc atgtcggaca agaccaccga cttcgtcccc atcttcgcca 360
aggccatgga gaagctcagc gtgctcaagg tgctcacggg gaacggaagg cgagatcagg 420
aagacgtgct ccgag 435

<210> 3620

<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-A12

<400> 3620

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gggtcgccgt gctagcgggt gccgcggatg tgcacaacgc cggccacgcc aagcccctga 120
cgcttggcgg gcgcgtggta caccacaacc acggcaagtt cacggccggg ccgtggaaac 180
ccgcccacgc gaccttctac ggcgggcggg acgggtccgg caccacggcg ggcgctgctg 240
ggtacaagga cacgcgcgcg caggggtatg gcgtgcagac ggtggccgtg agcacggtgc 300
tgttcggcga cggcgcggcc tgcggcgggg gctacgaggt gcgctgcgtg gacagcccca 360
gcgggtgcaa gcccag 376

<210> 3621
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-A4

<400> 3621

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cctcctggtc ctcttctgca tcgtgcatgg tgagaaggaa gagtcaaagg gcatcgatgc 120
gaaagcgctc gggcctgggt ggtccttcga catcaccaag ttggggcgct ccggcaatgg 180
caagacagac agcacgaagg ctgtgcagga ggcattggga tcggcgctgc gcggcactgg 240
gaagcagaca atcctcatat ccaagggcga ctctcttgct ggacaactca actttacagg 300
cccttgcaag ggcgacgtga ccatccaagt ggatggcaat ctgctggcga ccacggacct 360
aagccagtac aaggaccatg gtaattggat cgagattcta cgcgtggata acctgggcac 420
caccggcaag ggaaaccttg ac 442

<210> 3622
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-A7

<400> 3622

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accacatccg gccagcccaa cgaaaatgtc gcgcgccaca gctgcggtcc tcttctacat 120
cctcgccgtc gctgccctca gcgcggccga ggcaccggca gagtcaccga aggcaggcag 180
tcttgccaag gcaccggccg agtcaccgaa ggcaggcagt cctgcagctc ctgccaaggc 240
acccgagtct gctgccacga gaactgcccc cgctaaggca cctcaagccg cctccacccc 300
cgccgttgcc gctgccccat cgtcgtcgtc gtctaggaag tctggtccag ctgccgcgcc 360
gaccaccgcc gcctctacac cgtcttcttc caccgacgag gagttgagcc ct 412

<210> 3623

<211> 466

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-A9

<400> 3623

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atggcggtca tcagcaatgt cgcagtgtac gcggcgccg tggccgcgct gctgctggtc 120
gcaccggtgt cgctgccgc gcgcgcggcg gcggtggcgg tggcgggagg ggcgccgtcc 180
gtgccggcgg gtccgctgga catcgcgag ctgggcgcca aaggcgacgg caagtcggac 240
agcacccca tgatcctcaa ggcggtgcga gacgcgtgcg acgcgacggg ggtacacaat 300
atcgtcatcc cgccgggcaa ctacctgacg ggccgggtgg agctgaaggg cccctgcaag 360
tctccatca tcatccgtct ccacggcaac ctgctcggca ccggcgacct cagcgcgtac 420
caaacgaact ggatcgagat cgacatcgtc cagatcctgt ccatca 466

<210> 3624

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B11

<400> 3624

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tcgccatggc acgtctctgtc cccatcgcg cctctgtcct gctccccctc ctctctctcc 120
tcgtctccac tgcgtccgct gcacggaccg tgggcgacac cgtgcaggac gcgtgcagca 180
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tggccacgtt cgtgcacggg aagtacaaca acgccaagga cagcacctg ttcaagtgt 360
acgacagctg ctcgacgac gtcgaggagg ccgtcgcca cctcaacggc ctgctccggg 420
agcccaccga cgccaa 436

<210> 3625
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B12

<400> 3625

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gcctagctcg atcttgaacc atagctagcc agcatggcg ccagcagcag catagcagta 120
ctgtctctcc tcgtctctgc cgtctctctc tccaacgtcc cctctctggg cgccctggcc 180
tcctctctgt cgtctctgt gcaccagtcg tctcgtctg agagtgagac tgagaccgac 240
agtagcagcg gagaatcttc ttcgtctctg tcgtcggaag aggccggcga gaaggagaag 300
gagaaggagc aggagatgga gaaggcggtc gcggcggaga aggctgcca gcaagagctg 360
ctcaagtacg ccaaggagaa aggcacgtg tcaccgacca acggcacggg gtggtacaag 420
ggcatcgccc gggag 435

<210> 3626
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B2

<400> 3626

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 ccggccccgc gggcaccagc gtcccggtcc cgggtcccgt cccggctcag ccgagcgcggt 180
 acgagatgct ggaggggttc ggggtcccga ggggcatcct gccggagggc gtgaccgggt 240
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 tcgaggtgga cggcggttac cgcctcacgt accgccgcag ggtccacggc aacgtcgcgg 360
 gcggcagcat ccggaacctc ggcggcgtct ccgtcaggat gttcctcttc gactggagca 420
 tcgaccgcgt cgccgtggag gacgcggc 448

<210> 3627

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B5

<400> 3627

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 cggacgcgtg ggctgccatc ctctccaaca cgaagatggc gttcatcagc aatgtcgcag 120
 tgaaggcggc ggccgtggcc ggcgtgctgc tggtcgcagc ggtgtgcct gccgcgcgcg 180
 cggcggcggt ggccgtggcg ggagggggcg cgtcgggtgc ggccgggtccg ctggacatcg 240
 cgcagctggg cgccaagggc gacggcaagt cggacagcac cccgatgac ctcaaggcgt 300
 ggaagaacgc gtgcgaggcg acgggggtac agaagatcgt catcccgccc gggcaactac 360
 ctgacgggcg ggctggagct gaagggcccc tgcaagtcgt ccatcatcat ccgtctcgac 420
 ggcaacctgc tc 432

<210> 3628

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B6

<400> 3628

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 cgtggccttg ctgagcgtgg ccctagtggg cctgctcctc tgccacctcg ccaccaccgc 120

ctccgcccac cagaaagaca tccacgtcct cggcagcgtc gacgggtcca gcgacggcag 180
cagccccgag tccgaaggcc ggcgtcgtcta cgcgacatg aagctggctg atacggaatc 240
cgatgcgccg gcgccggcgc cggcgccggg gccgtcgtcc ggttgaactg agaagcgtgc 300
gtccagccaa gcaagggtgt caaaaccgag aactaattaa gggctcgatc gtgtgtcagg 360
ctactactgt tcttgccata attatatata gatacgcaaa gtgtgggcaa gcctaccca 419

<210> 3629
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B7

<400> 3629

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acatctacct caagacacac cgggggctgg acgagatcga gcgggagaag gtgtgcagcg 120
tcatggaccc gctcaggctg tcgtaccagg cgcggtatgca cgcgtcgcag aacaagcggc 180
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acggcagcgg cggcacggag gaaggggtgg agacacagtc ggccgccggg aaggcccgtg 300
cgcaggcgcg ggccgacgtg tccctggcaa gggagaacga ggcgctgccg ttggagctgg 360
cgcggtatcg agcgtacgtg tcagggatgc agcagagcag caaggggagc ggggccaggg 420
catcgtcgtc atcgttggtt ccaggcccag cg 452

<210> 3630
<211> 465
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-B8

<400> 3630

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ccacaccgtc ctcatctcca ccagcacga cgagacagt accaatgatg agatcgtgc 120
tgacctgaag gagcatgtca tcaagcctgt catccctgag cagtaccttg acgagaagac 180
catcttccac cttaacccat ctggccgctt tgtcattggt ggacctcacg gcgatgctgg 240

cctcactggc cgcaagatca tcattgacac ctacgggtggc tggggagccc atggtggtgg 300
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 ggctgccaag agcatcgctc ccagcggcct tgctcgccgc gccatcgctc aggtgtctta 420
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<210> 3631

<211> 261

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-C1

<400> 3631

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 aggtccctgt gtgggctttg tgagagcgcg cggcatgttc tgcattttgt cacaaccatt 180
 atttgcaatg atgaattttc ctctcgctt tcaatcaatt cgactcctag gctacgatct 240
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<210> 3632

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-C10

<400> 3632

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 gagcatggac attgtcaggg cgcgagctct ctgaagagga agacgcgcat ccgctcgcgc 240
 gatcgccatg catgccccgg aacgacagaa gctgtttgtc ttgcatcgac cggcggcctc 300
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<210> 3633

<211>	424
<212>	DNA
<213>	Zea mays

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<223>      unsure at all n locations
<223>      Clone ID: LIB148-007-Q1-E1-C12
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cccc						424

cgcgtccacc	cacgagtcgc	tggaaagcga	ggcgttttgt	tttctcccg	gctccccctc	60
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gcgggggagg	gcggggggct	gggcggaacg	cggggagggg	ggggaggact	gcggtaagct	360
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<223> Clone ID: LIB148-007-Q1-E1-C5

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<210> 3636

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-C6

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caagcgcggc cggtcctact acagcaactg cgaggcgcag aaggccgcca acccctaccg 360
ccgcggctgc tccgccatca cgcgctgcgc ccgcaacatg aactgagccc agcgttagct 420
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<210> 3637

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-C7

<400> 3637

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ggccccttgg aaaagaacaa caacggcaag ttcacggccg ggccgtggaa acccgcccac 180
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gacacgcgca cgcaggggta cggcgtgcag acgggtggccg tgagcactgt gctgttcggg 300
gacggcgcgg cctgcggagg gtgctacgac gtgcgggtgcg tggacagccc taccgggtgc 360
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<210> 3638

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-C8

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catcttccga ggatctagac tccactaaga ctgtcctttg acaagctgga cgggtgttgac 360
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<210> 3639

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-C9

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ccctctggcc tcgtctgtcc tcccccttc ctccccccac atgcgctgcc cccgcccggc 180
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cccgcatctgc cacagcgggt tccttgagga gatggagacc gtccgcggca cggccgcggc 420
cgatgacggc ga 432

<210> 3640

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D1

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tgctgcggca gatgcgctg ccgtcgcagg agctgctgca gccctgcaag gaggacggca 420
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<210> 3641

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D10

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gattttttgc aaaggggtggg tcattgggtta actactacat gtaccacgga ggaacaaatt 360
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<210> 3642
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D5

<400> 3642

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ctctcctcgc tcgtggccgc cctctcggcg cgcgccgcgg cgcagcaggt gccgccggtg 180
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<211> 459
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D6

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tgtcgtcggc gggtcgtgcg ggccccgaa ggtgccgccc ggcccccaaca tcaccaccaa 180
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cgaggtgaga tgcaaggaaa aacctgagtg ctctgggcaat ccagtcacgg tgttcacac 420
agacatgaac tacgagccta tcgctcgcta acatttca 459

<210> 3644
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D8

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tccttggtgc ggcgccggcc gccgcgaacg cgcccggcgg ggcgttcagc aactgggtgg 180
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tgaacatcag caagccgtt 439

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<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-D9

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gcattcacgg agcttgcttg aaactggccg aggagcaata cagaaggtct catcaattac 240
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cccatgatg aaggccggac atggcaagtc ggactttctt gggaagtctg acgatatccc 360

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 tcgattagct gcaggaaggg tg 442

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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-E1

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 <212> DNA
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<223> Clone ID: LIB148-007-Q1-E1-E12

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 caccatggat gacgtcaacg tcgagtatag tggcaccaac aacaagacca tggctatatg 240
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 cagtcgactg acccatctct ctagttataa tttttctctc gtccttgaat tgtccattag 360
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 <212> DNA
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<223> Clone ID: LIB148-007-Q1-E1-E5

[illegible]

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<400>	3649
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<223>      Clone ID: LIB148-007-01-E1-E7
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ccccaacgtc tccgtgaagg gctacgacgt gatcgaggag atcaagacgg agctggagaa 360

gaagtgcgcc aacgtggtgt cgtgcgcgga catcatctcg gtgagcgccc gcgactcgg 420

gaagctgacg ggc 433

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<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-E8

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cacacattag atctaggcgt ataaccatc gggccgtcga tcattgaatc gatggctgcg 180

atctcgttct ggttcggtgg taagaaaatt taatcgtggc ccttggtgca ggatccaact 240

gctagactta accgataccc ttctgaagac atccatccca gggcgggccg tctagagga 299

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<210> 3653

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tactgaccat atacttcagt gtttgttcaa ttgccatgga cagttggacc aacggaagga 420

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<210> 3654

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-C5

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gagcgtgcat tccaacatct gggagcggta ct 452

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 <211> 456
 <212> DNA
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 <223> Clone ID: LIB148-066-Q2-E1-C6

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<210> 3656
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 <223> Clone ID: LIB148-066-Q2-E1-C8

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<210> 3657

<211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-066-Q2-E1-D10

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<210> 3658
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 <223> Clone ID: LIB148-066-Q2-E1-D11

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<210> 3659
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 <223> Clone ID: LIB148-066-Q2-E1-D12

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caagtgatgg agatggattt cgacgtcggc atttactgta gctgcatcgc cgtcgtcctc 240

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<210> 3660

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-D2

<400> 3660

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acctggccgt gctgaacatg caggtggacg cgttcgcaa ggcaccgcg caggcgcgca 180

agcacgtcgc gaggtcggcc cgcaccatcc cgccgcagca gacgcaggcg ctcacgttct 240

gcgacaccat gtacatgaac acgcaggaca ccatcggcgc ggcgcagcgc gccatcacgt 300

tcaaggacac cggcaccgcc aagatcatgc tgcagctcgc cgtccaggac ttcgactcgt 360

gcgaccgccc cttcaccag gccggcgctc ccaaaccat ggggaagttt gacaaggagc 420

tcaaccagat ggccaacaac tgcattggctc ttgcaaacat gata 464

<210> 3661

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-D3

<400> 3661

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cacgatgagg gcgcctctcc tctcctcgct cctcgtctc gccgtcgtcg ccaccgtgcc 120

tctactagtc cgggcggtgt gcatctcgcg gcacgacaag tccgagagca aggctgacga 180
agaagctgct gctactaccg ttgccgccga cgagcatggc tctgtcaaga ccatgtccct 240
cgacgcatac gggccactgg agatggccgc caagaagccc aaggagcagg tcctgaacgc 300
gcaagctacg ccggcgacga ccgctggcgc tgacacatat gaccagaaac ccgttggtga 360
aaaacaggct gaaacggcca cggcctccgc tgccgatgaa caacccgaca aata 414

<210> 3662
<211> 452
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-066-Q2-E1-D4

<400> 3662

cccacgcgtc cgcggacgcg tgggcgcgag cgcagaaggc acacacgtac agccatggcg 60
aactcgctgt ccggcctggc ggtgagcgac gagtgcaagg tgaagttccg ggatctgaag 120
gcgcggcgga gcttccggtt catcgtgttc aggatcgacg acaaggacat ggagatcaag 180
gtggaccgcc tcggcgagcc gaaccagggc tacggcgact tcaccgacag cctccccgcc 240
gacgagtgcc gctacgccat ctacgacctc gacttcacca ccgtcgagaa ctgccagaag 300
agcaagatct tcttcttccc ctggctccct gatactgcac gcacccggag caagatgctg 360
tacgccagct ccaaggacag gttcaggang gagctggacg gcatccagtg cgagatccag 420
gccaccgacc ccagcgagat ggcctcgac at 452

<210> 3663
<211> 467
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-066-Q2-E1-D6

<400> 3663

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taaggaaagg tcccgcctt ttctccgac atccacagg gggaggggaa aacacgtgca 120
ttcaccggc ggcaataatg gctcgggtc cggctccggc gacgacgacc gccgccgtaa 180

tcctatgcct atgcgtcgtc ctctcctgtg ccgcggtga cgacccaac ctccccgact 240
acgtcatcca gggccgctg tactgcgaca cctgccgcgc cgggttcgtg accaacgtca 300
ccgagtacat cgcgggcgcc aaggtgaggc tggagtgcag gcacttcggc accggcaagc 360
tcgagcgcgc catcgacggg gtcaccgacg cgaccggcac ctacacgac gagctcaagg 420
acagccacga ggaggacatc tgccangtgg tgctggtggc cagcccc 467

<210> 3664
<211> 467
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-D8

<400> 3664

gtcgaccac gcaaccgacg aaacaaaaga agctattttg acaccacaca cacacacaca 60
gaggagagaa gataagagaa cgaggggagc ggcagccagc gccgctagct gaagcaaggc 120
agggcaagag aatccgtacg tcgaggactt cgacaagctc caccgcgcgc tcggggacgc 180
cttcttcggc gcaactgggag gccaggacga cgccaccgcc gcggcgagc gcgccggcgc 240
cggcgccggc gccgaggagg acgagcagga gatgcgggag gcgttcaagg tcttcgacgt 300
cgatggcgac ggcttcatct ccgccgctga gctgcaggag gtgctcaaga agctcggcct 360
ccccgaggcc agcagcatgg ccaacgtccg ggagatgac tgcaacgtcg accgcgacag 420
cgacggccgc gtcgaattca acgagttcaa gtgcatgatg cagggga 467

<210> 3665
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-E1

<400> 3665

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tgacggtgga gatggccggt ggcgcgaggc tagagccgga agccaagagc gtggtgatgc 120
cggaggtagt gcccggggtg gcgtgcctgg ctttaggaa gctgccgcgc ggagggcccg 180
ggatcttggg caacgtgctc atgcaggagt acatctggga gatcgaccac ggaaagggga 240

agatgaggtt caggaaggac aagtgaaca cccatcatct ccacaacagc aaaggcggag 300
 aggtctataa taataataat ggcaattcct cctctactgt cgtgcatcgc gtcaattaat 360
 tcgttctctc ttctctatct ccacaaaatt taaggaccag accatgcatg cac 413

<210> 3666
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-E10

<400> 3666

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 tgatgccaca gctgcgtagc ctcgtcgcgc tggctctcgt ggccacggcc atagccgccg 120
 ctccccggcgt tgggtttgtc gtcaccggcc gcatctactg cgacaactgc cgcgccgggt 180
 tcgagacaaa cgtgtccac gccatccaag gcgcgacggt ggagatggag tgccgccact 240
 tcgagtcgca gcaggtccac gacaaggcgg aggcgacgac gggcccggc ggctggtaca 300
 ggatggagat cagcggcgac caccaggacg agatctgcga cgtgcgcctg ctcaagagcc 360
 ccgaggcgga ctgcgccgag atcgaccact cccgcgaccg ctgccgcgtc ccgtcaccc 420
 gcaacg 426

<210> 3667
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-E12

<400> 3667

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 gcaacttgga gaagaacaag ggggccaaagg ggagccagct cgagaccaac aagaaggcca 120
 tgagcatcca gtgcaaagtg tgcattgcaaa cattcatgtg taccacgact gaagtgaagt 180
 gccgggagca cgccgaggcc aagcatccca agacagacgt gtaccagtgc ttcccccatc 240
 tgaagaagtg aaaggcctga acttagcaac cagtgtgtgt ttggtcacta cgatcgggcc 300
 agggggcggt ccttgtgttg aggggtgttca ttccgtgtta tcttcccgtc agtcatgcgt 360

cctgtcctat gttaacctac ataagaaagt gatgtggtgt ccacttctag tgaaactact 420
gtctgccgtt t 431

<210> 3668
<211> 430
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-066-Q2-E1-E5

<400> 3668

accacgcga ccgaaaacgt cgtacgagaa cttttctccc tctccacct ttctcctttt 60
cttgccacgg caaaacacct tcgccggcga gagcatggcg atggcgtagc gtgtcctgga 120
ggtcaccctg gtgtcggcaa atgacctcaa gaaagtgtcg ctcttctccc ggactcgcat 180
ctacgccgtg gcttccatct ccggattcga cctccgcata cttcccaca gcaccaagc 240
agaccacagc aacgggtgca acccctgctg gaacgccgtg gtacacttcc ccatcccggc 300
tgccgtgac acccgcgccc tcgcactcca cgtgaggctc cgcgcccagc gtctatacct 360
gggcgatcgc gacatcgggc aggtgtntgt gnccatcgac gacctcctgg ccggcgccga 420
caagggtggc 430

<210> 3669
<211> 330
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-E7

<400> 3669

gggtccaccc acgcgaccga ttctccatca tgctcgccac gacgacactg gctacatttt 60
tcgtgattgg ttctgtcacc acccgtctca ctttcgaggt cggcaaaggc tccaagcctg 120
gccacctggt cctcaccccc aacattgcca ccatctccga agtggagatc aaggagcacg 180
gtggcgatga cttctccttt gagctcaagg agggcccggc cggcacctgg acgcttgaca 240
ccaaggcccc gctcaagtac cccctctgca tccgctttgc cgtcaagtct ggcggtacc 300
gcatcgccga tgacgtcatc cctgaaaatt 330

<210> 3670
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-E9

<400> 3670

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gggtcgagca cgcgtccacg agcacgagct cagggccgtc tctgtcggcc accaagtcct   60
cgcccaacct ctgcggcacg cccagcccag gtagccctgg tgcgcactct agtaacgcct  120
tggagtcatt gaagatttgc aaccaggag ataaccctct gcttgtgaag acaaggctca  180
ggcactgggc tcaagtagtg gcttggttcag tgaagcactc gagctgatcc tcgtcagtgt  240
tttattcacg ctcttcttcc atacataata cccgtacaag tggttgcgat ggcgatgaat  300
tagtcgtgtc cgagtgaaac tagatcaatt gaccttggtg ctcgatctaa tgctgtccca  360
ggtcacattg ttgtggacag atttaattag cgtcgggttg gc                               402
  
```

<210> 3671
 <211> 406
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-066-Q2-E1-F10

<400> 3671

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gacagacgac gacaccacga gcccgaagaa gagagccatc gcggctgctg atgacgattg  120
caagcctgcc gatgacgagt caacgtcgtg gaagcgcctc gtggacggta tgcgcccgt  180
ccgcctccgc gggcagctgg agtactacct gccgccaccg ccgccaccgc cgctggggcca  240
cgccgatgtg taccatgacg tgatcctccc gccgccgtcg caggcacggt tcggcttcga  300
gatcaaggag gtgggcatga ccagccgcta cgcgtccgct gaggatctgc accagatgga  360
cagcgaccag gaagaggggtg ctganggtgg cgatgacggt gacagc                               406
  
```

<210> 3672
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F12

<400> 3672

cacgcgtccg cccacgcgtc cgaccctaga aagctagaca ccgtacccat ggctcgcgct 60
agcgtcgtct ttgtcattgc cgctctcttc ttcgtcgcca tggtcgtagc accgatggcc 120
gaggcaaagt ccgccgatgc ccctgtggct gacgcgccag ccgatggacc tagcggggccg 180
gctgctgcac ctggccccca ggggtgtcgaa ggcctgtcag gcaatgagga tgacgatgat 240
gactccacca attgaggcca cacacgtcgg cccgggttaa tttggaacaa gacatggaag 300
aaaaatgaga gcaatgtctt taaaaccatg ataatgtgtg gtcattccact catccatgga 360
tacatccttg ctctccct 378

<210> 3673

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F2

<400> 3673

gggtcgaccc acgcgtccgc accacgcgtc cgcccacgcg tccgggcggt tgtaggggag 60
gaggtggagg cggaggcgga ggccggtgca tcgtctgcga agaagaaccg tatccagggtg 120
tccaccaaca agaagccgct ctatttctac gtcaatctcg ccaagaggta catgcagaac 180
tacgacgagg ttgagctctc cgctctgggg atggccattg gtaccgtggt gaccgtcgct 240
gagatcctca agaacaatgg cctcgccact gaaaagaaga tcctcacatc aaccatcggc 300
accaaggatg aggcgaaggg ccggcttgtc cgtaaagcca agatcgagat cctgctgtgc 360
aaatcagaga acttcaacag catcatgtcg agcaagaagt ccgagcgccc gaagccgccc 420
gccgaggaag agataagggtg tgatctatcc gaacaacg 458

<210> 3674

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F3

<400> 3674

ggggtccaccc acgcgtccgc ggtgccacaa cctctcctgc tgtcgtgct ggtcgccgtg 60
 ctagcgggtgg ccgccgatgt cgccaacgcc ggccacgcca agcccctaac gcctggcgagg 120
 cgcgtaggtac acgacaacca cggcaagttc acggccgggc cgtggaaacc cgcccacgca` 180
 accttctacg gcgggcgtga cgggtccggc accacggcgg gcgcgtgcgg gtacaaggac 240
 acgcgcacgc aggggtacgg cgtgcagacg gtggccgtga gcactgtgct gttcgggtgac 300
 ggcgcggcct gcggaggggtg ctacgaggtg `cggtgcgtgg acagccctag cgggtgcaag 360
 cccgacgcgg cagccctggg ggtgacgggtg accgacc 397

<210> 3675

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F4

<400> 3675

ggggtccagcc acgcgtccgc aagaacgcgc tgccgcggta cgacggcacg gcgcacgacc 60
 aggtggtcac caccggccgcc gagcgcgccg ccgaggaccg gatggtggcc ttcacgtacc 120
 tgcgcatggg ccccgacctc ttccaccggg acaactggcg gcgcttcgcc gccttcgtgc 180
 gccgcatgaa cggcgccggg tcgtgccggg aggccgcgga gcgggaggcg caccggcgtcg 240
 cgcaggccac cgggtcgctg gtgcacgagg ccgccgtcgc gctgcggagc tgaccggccg 300
 ggacgggacg ggacggaacg gaagcctacg atcgactgta catacagggg ttgggacttg 360
 ggagggagct cgggttcttg ttgggttttc ctttgggtgg agagcgaggg agcgcagtcg 420
 agagccagcg agca 434

<210> 3676

<211> 189

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F5

<400> 3676

gtaccgatcc acgaattccg ggtcgaccca cgcgtccgca caccggtccg ctagctcctt 60
 gatgacttga tgacatagct acgaaggaaa tagctttaca tctcgtgtt ctaggcagca 120

gaagttttgt ttgcactttg caaaactgta tatecttctc agctgtctca ttgtaaccca 180
 ttcttttttc 189

<210> 3677
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F6

<400> 3677

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 agaatctcgg gagggtcagt aagatggatt cagtctcacg acctgctgct gctgatgttg 180
 aggagtaacc agaaccagaa ccgccgtcct cgattctgat agattatctt ctagtatacc 240
 ttgtgttggt gctgttgctg tcgtcgcgcc ggtgtatgcg atgaagctgc cattgctgct 300
 gttttaatta agcattctag atgttatacc gcatgctttg tttcggtttc taatgtcgat 360
 aaatgggtggc cggatgctgg ttttcgtgct ccgagccggc caccaggaag aagacctgcc 420
 tgcc 424

<210> 3678
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F8

<400> 3678

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 atgggggtccg cctccgcctc agtgatgacg accagcctgc tggcgctggc gctggcagcg 180
 ctggcctttcg tctccagggc cgcggcgcag ggcaacggct gttccagcgt gatgatgacc 240
 ctggccccgt gcatggactt catctccagc aaggcgtcgg agccggggat ctctgctgc 300
 tcggtgctgg ctggagtcgt gcagaccgac ccccgctgcc tctgcatggt cctggacggc 360
 accgccacgt ctttcggcat cgccatcaac cagaccaggg cactggagct ccccgcgctc 420

tgcaaggtca aggcgccgcc gctc

444

<210> 3679

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-F9

<400> 3679

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cgcgctcgac accgcgaaga cgcaatggta ccacttcacc gccatcgtgg tcgccggcat 120

ggggttcttc accgacgcct acgacctctt ctgcatctcc ctcgtgacta agctcctcgg 180

ccgcatctac tacaccgtgg aggggtccgc gacgcccgcc accctcccgc cgcacgtgtc 240

cgcgctccgtc aacggcggtgg ccttcgtggg cacgctgtca gggcaactcc tcctcggctg 300

gctgggcgac aagctcgggc gcaagaaggt ctatggcatg acgctcatgc tcatggctct 360

ctgttcc 367

<210> 3680

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-G1

<400> 3680

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ctccagcgtg gggcgcaacg acggcgggcg cgtcgccggc ctcgtggcct gtgggatcgt 180

gatggggacc atgtccaacg ccaacaacct gatgcaggac ctcaagacgg ggtacctgac 240

gctgacctcg ccgcacaccg tgttcacacg ccaggccatc ggcacggcgc tcgggtgcgt 300

cgtcaacccg gtcatgttct gggccttcta cagggtgggt cagaacggcg acaccgacgt 360

cttcgacgcg ccct 374

<210> 3681

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-G11

<400> 3681

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acggctgcct cgtgtacgag tacatggagc acggcagcct cgaggaccgg ctgttccgtc 180

ggggcggcac gccgccgatc ccgtggggcg agcggttccg gatcgcgggc gagatcgcg 240

cggcgctgct gttcctgcac cagacaaagc cggagccgct ggtgcaccgg gacctgaagc 300

cggccaacat cctgctggac cgcaactacg tgagcaagat cagcgacgtc gggctggcg 360

gtctggtgcc gc 372

<210> 3682

<211> 351

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-066-Q2-E1-G12

<400> 3682

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tcacgctcgc ctccagcgca acggtgtcga ctgctcatga cgagagctgc tggaaggacg 180

acgaccacca ccttatctgc tttcccgaag actgcgtggc gacctgccag gatcacggcc 240

acgcggacgg ccgctgcaac tgggcatggt cgtggaggcc gtattgccag tgctgttgg 300

cggactgcca ataggcgcgga acagctgcgt cgcattggcgt cctggctgcc t 351

<210> 3683

<211> 328

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-G2

<400> 3683

gggtcgaccc acgcgtccgc agacacgtgg gcgagtcgct gacgttccgg gtgatgacca 60

gcgaccaccg caaggccacc tcatggcacg ttctccccgc tgactggaag ttcggcgta 120
 cgtaccaggc atccaagaac ttcgaagtag ccactttccc tctcttctt catcctgcat 180
 atgccacaa gcaaccatgc aaatgataac atgcatcatg catgcatatt cattctttcg 240
 ctcatgcact ccaatatggg gccggagtta aaaaaatgta gatcaatgtg caaactcaaa 300
 tgacatctta accagttgtg atcaaaat 328

<210> 3684
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-G3

<400> 3684

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 acaagttgtg tactgccaac ggcgccctcca aggtcacgt caaggacgtc accttaaga 120
 acatcacggg cacctcctcc accccggagg ccgttagcct gctctgcact gccaaaggtcc 180
 catgcacggg cgtcaccatg gatgacgtca acgtcgagta tagcggcacc aacaacaaga 240
 ccatggctat atgcacgaac gccaaagggc gcaccaaggg ttgcctcaag gagcttgc 300
 gcttctagac cctccgtcga ctgacccatc tctctagtta taatttttct ctgcctcttg 360
 cattgcccac tacatgccat ccattggtaa cgcacaacag ttaaacgaca gaca 414

<210> 3685
 <211> 453
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-066-Q2-E1-G6

<400> 3685

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 ggtcacgggt tggatatcata cctcaggaac ctgttctctt tgaagggacc attaggagca 120
 acattgatcc gcttgagcag tattccgatg atgaaatctg gcaggcattg ggccgctgtc 180
 agttgaaaga agccgtagct tcaaaacccg aaaagcttga tgcttcagtc gtcgacaatg 240

gtgagaactg gagtgttgga caacgtcaac tgctatgcct gggccgggtg atgctaaagc 300
acagcagaat actgttcatg gacgaggcca ctgcttccgt tgattcccag accgatgctg 360
tgattcagaa gatcatccgg gaagactttg cagcttgtag cattatcagc attgcgacaca 420
gaatacctac ggtgatggac tgcgacaggg tcc 453

<210> 3686

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-G8

<400> 3686

gggtcgaccc acgcatccga ccacgcgtcc ggcagcctgc ggctgcagcg gcaggcgtgc 60
tgcgagccgt cgggtggcgcc gtcgcggggc gtgttcgcct gccggggccgc ggcgtcgggg 120
agcgcggccg acctggcctc cggggggcagg aggtcgtccg gcgtgccggg gttcgtcatg 180
atgccgctgg acaccgtcaa ggagtgcggc accgcgctgc accgccgcaa ggcggtgcag 240
gccagcctct ccgcgctcaa gagcgcgggc gtcgagggcg tcatgggtga cgtgtggtgg 300
ggcatcgccg agcgcgacgg cccggggccg tacaacttcg cgggctacgc ggagctcatg 360
gagatggcgc gcaaggccgg gctcaaggtc caggccgtca tgccttcca ccagtgcggc 420
ggcaacgtcg gcgactccgt cagc 444

<210> 3687

<211> 421

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-066-Q2-E1-G9

<400> 3687

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caaagatgga gtttgagttt gaaaggagaa gaggtagaaa agaagacatt agggagctga 120
tattccgtga gatattggaa tatcatccac aactgctcaa agactatata aatggcacgg 180
agaggacaac ctttctgtac ccaagtgtg tcgaccaatt taggaagcaa tttgctcatc 240
ttgaagaaaa tagtggaac ggacctgtga ttccaatgga aagaaaacat acttctcttc 300

ctaggtctac tattgttcac tcattctccaa ttctgtgtaa ggaacaaccc cgtatcggcc 360
catgtangga aaggccttca tctgatgagt cctacaggaa tcctcgggag acagaacaat 420
a 421

<210> 3688
<211> 348
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-066-Q2-E1-H1
<400> 3688

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ttccttttga tcccacatct cgctgctcga ggaagttctt ggctggaggt tttgtcttta 120
cggagacttc ctggtcatct cttttgtcaa ctgcacttga ggatcaaccc acacttagtg 180
actgccttgc ctggtcccat gctgtcagac attagagttg cccagtgatt acactattac 240
agtgcagctg tagcacattht atttgagcat ggtggatctg tttctctggc aacattccag 300
taatctttgt cttggtgcta atcagccagc agaagtttac atcaagac 348

<210> 3689
<211> 188
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-066-Q2-E1-H10
<400> 3689

ggtcgacgca cgcgtccacc caacgcgtcc ccacgcgtcc gggagtggac cggccgggta 60
acggatctct cgggtgctaatt tcgtgatctt gaccgggtga agcagatggg gtttgcattgt 120
ttgtttcatt cttgcattga ttgttcgttg ttaactagtg tatgatgaat cggtcggttaa 180
cgcttatt 188

<210> 3690
<211> 248
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-066-Q2-E1-H11

<400> 3690

cgcggtccgat cgaaaggaga accagcagcc tccaataaga gccagccaga gaaactaata 60
gaactctcgc cgccgccatc cgagcgaaca agccatccga ccccggtcccc aaggcaatcc 120
gccgccgacg taccaccatc accgcacgag cgagatggac atgaacacga tcctcttcgt 180
cgctctcatc gtcategccg cctccgccac cgcagtgggtg ggctcaccga cgccgcgcgcc 240
tcggggccc 248

<210> 3691

<211> 338

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-H12

<400> 3691

gtccgaggac gagtgggcgg agatggagat ccccgaggag tatatcgagt ccctgccgaa 60
gaacggaagg tccattcttg gagactccat gtacaagatc ataaccgacg acgtcttcga 120
ccccaacgag ctctgcagt ccgtggacct gtcgacggag cacaagatcg tggacctcaa 180
ggaccggatc gaggcctccg tcgtcatctg gcaccggaag atcagcaaca agctctcgtg 240
gggccccgcc ggcgtcagcc tggagaagcg ggaggagtgc gaggagcggg cgcagaccgc 300
cctgctcatc ctcaagcaca ggttccccgg gatecctc 338

<210> 3692

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-H2

<400> 3692

accacgcgt ccgcacacgc gtccgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aggggagaaa acaaaaaaaaaa 180
ttgggggggg cctttaagggt tttctgtttt tttttaccct ttcttgaggt ttcaaaatct 240
tccattgggg gcccttattt ttaatcccgg ggccttggtt taaccctggg ttaccgggaa 300

aaacccgggt tttaaccaatt ttaccttttt tgaacgtatt cccttttttcg caaggtgggt 360
aattttccat tgggccccat tttttccct tttcaaaaa 399

<210> 3693
<211> 368
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-H3

<400> 3693

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ctcttgctta catgcatcag aggggctact ttcacgtga cctcaaact gagaatctgt 120
tagttagcaa agatgtcata aagctagcag actttggtct tgcaaggga gtttcatcat 180
tgccgccata tacagaatat gtctcaactc gctgggtatcg ggcaccagaa gtattgctcc 240
agtcactctgc ttatgattct gcagttgata tgtgggcaat gggtgccata atggctgagt 300
tgttgacact ccatcctctc tttcctggaa ccagtgaagc tgatgagatt cacaagatat 360
gcaatgtc. 368

<210> 3694
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-066-Q2-E1-H5

<400> 3694

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cccaagccga acgcgatcgt ggccaaggac ggtagcgggc agttcatgag catccagcag 120
gccgtggacg ccgtgccccaa gggccatcag gggaggtacg tcactctacgt gaaggccggc 180
ctctacgacg agatcgatcat ggtccccaat gacaaggcca acatcttcat gtacggcgac 240
gggcctaagc aaagccgcgt gaccggccgc aagagcttcg ccgacggtat caccaccatg 300
aagaccgcca ctttctccgt cgaggcgctc gggttcatcc gccagaacat ggggttccac 360
aacacggccg gtgcggagcg gcaccaagcg gtggcgctcc gggtgcaagg ggacct 416

<210> 3695
 <211> 431
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-066-Q2-E1-H7

 <400> 3695

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 ttggtacggg agggcgagga aatggaataa gacggctatt ccaatcctaa tcgggacaaa 120
 gtttgatgac tttgctcagc ttcctcttga gatgcaatgg gccatcgta accaggccag 180
 agcatacgca agagcgatga aggcgaccct cttcttctcg agcgcgacgc acaacatcaa 240
 cgtgaacaag atcttcaagt tcatcacggc caagctcttc aacctcccgt ggacgggtgga 300
 gcgcaacctc accatcggcg agcccatcat agacttctga cgacccttc ctctaactag 360
 taactcggca acacacgcaa gacgaacctt ggtaaataac aagggtttac aaggtcctgt 420
 ccttccattc t 431

<210> 3696
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-066-Q2-E1-H9

 <400> 3696

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 gccggggccg acgaccagtt gaagcgagga aggtggccaa aactgagggc ccggctacta 120
 tcttttgcta taactaaaga tagggcgaag tttaatttct ccaataaatt ctgtccgagc 180
 aaaaagtatg atgggggttt tagtcgagat ggtaaagtga tgacgcgcgt gtggaccaag 240
 accaagagtc atggcttgct gtacttggtg tttctgagct gcaacactca atcgactact 300
 aaactaaggt aataatatat atatatatga tatgcttaat aagatcatac acaatgcac 359

<210> 3697
 <211> 432
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-059-Q1-E1-B1

<400> 3697

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gaggcggagg cggagacgga gacagagact gaaggcgaag cggaggcaga ggtcgaggcc 120
gaggtggagg tcgaggtgga ggcggaggcc ggtgcatcgt ctgcaagaa gaaccgtatc 180
caggtgtcca ccaacaagaa gccgctctat ttctacgtca atctcgccaa gaggtacatg 240
cagaactacg acgaggttga gctctccgct ctggggatgg ccattggtac cgtggtgacc 300
gtcgtgaga tcctcaagaa caatggcctc gccactgaaa agaagatcct cacatcaacc 360
atcggcacca aggatgantg caanggccgg cttgtccgta aagccaagat cgagatcctg 420
ctgtgcaaatt ca 432

<210> 3698

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-B10

<400> 3698

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agcggctgca cgcggccttg ttcttcgtga tgggattctg gctgctggac ttttccaaca 120
acacggtgca gggccccgca cgcgcgctga tggcggacct cgcaggcagc cacggaccca 180
gcacggcgaa cgccatcttc gtgtcgtgga tggcgatcgg gaacatcctg ggctactcgt 240
cgggggtccac cgacaagtgg cacacctggg tcccgttcct gcagacgagg gcatgctgcg 300
aggcgtgcgc caacctcaag gccgccttcc tgggtgcggt ggtgttcctg ggctgtcca 360
cggtggtgac catgatcttc gcccgcgagg tgccgctgga cccggcgggc gcggcgga 417

<210> 3699

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-B11

<400> 3699

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 cccaaagggt tatccagccc tctggatctg gtgttgactt gggattcttt tctcttgatg 120
 agctttcgag ttcattcaggg gaagtattcc cacttggtgt ttatgcagaa gcatatccat 180
 ctccagagga aggtggcccc tcagtaaacg cactcgtgc acagattact cttgctgttt 240
 tggagaagca caacaacgac cttcaagtca aagttatgaa gcaaattctg tggattgatg 300
 gcgtgaggta tgagctacag gaaatctttg gtcttgtaa ctccactgaa gcggatgttg 360
 ctgatgctga tgccgatgac acggggaatg aatgtgttat ctgcttgta gaaccaagag 420
 aactg 426

<210> 3700
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-059-Q1-E1-B2
 <400> 3700

gggtcgacgc acgcgtccgc ccacgcgtcc gcacaacaca aggagaaggg gaagggcggc 60
 gaggaaggg ctccgcgtcg tgtcccttct ctctctctc ctctctctcc tctctccaac 120
 acccatcca tcagcgtgc cctccgcatt gctcttgatc ccatccagta catcgattct 180
 ccccccaaga tcaaaggccg gaggaggaag aaaggtagg gagtcggcca tgggatgctt 240
 ttcattgctgc tgtgtggcag atgacgacaa cgttggcagg aggaagaagc atgacgatcc 300
 ctatgttctt atccctgctc atgtttataa ttttggacct agccggttcc cagccccaac 360
 ccctgtcatc tccactggca gagctcagcc aattgcaatt acgggcaatt catctggaag 420
 agctgaagga aatt 434

<210> 3701
 <211> 450
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-059-Q1-E1-B4
 <400> 3701

cggtcaagaa ttaacgggtc gacgcacgcg tccgcccacg cgtccggaca agatggcgtg 60

cacagacaat gcgatgaaag ccttggttcc cctgggtcctc cttctgcatac gtgcatgggtg 120
agaaggaaga gtcaaagggc atcgatgcga aagcgtccgg gcctgggtggg tccttcgaca 180
tcaccaagtt gggcgccctcc ggcaatggca agacagacag cacgaaggct gtgcangagg 240
catgggcatc ggcgtgcggc ggcactggga agcagacaat cctcataccc aagggcgact 300
tccttgctcg acaactcaac ttcacaggcc cttgcaaggc cgacgtgacc atccagggtg 360
atggcaatct gctggcgacc acggacctaa gccagtacaa ggaacatggg tattggatcg 420
agaatccacc cgtggataac ctgggtcatca 450

<210> 3702

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-B5

<400> 3702

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actccttcac caccactgct gagcgggaaa ttgtcaggga catgaaggag aagctcgct 120
acattgccct ggactacgac caggagatgg agactgccaa gaccagctct tctgttgaga 180
agagctacga gctgcctgac ggacagggtca tcaccattgg tgctgagcgc ttccgctgcc 240
ctgaggtcct cttccagcca tccttcattg ggatggaagc tgctggtatc cagcagacca 300
cctacaactc catcatgaag tgcgacgtgg atattaggaa ggatctgtat ggcaacatcg 360
tcctctccgg tggtagcact atgttccttg gcattgctga cagga 405

<210> 3703

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-B8

<400> 3703

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acgcggtgta caggcagggc cgcaacgggg acgccatcgg gccgctggag atccgggtgg 120
tgcgcgccgg cacgttcgag gaggtgatgg actacgccat ctcgcgcggc gcctctatca 180

accagtacaa ggcgccgagg tgcgtgtcgt tcggacccat catcgagctg ctcaactcca 240
 ggggtggtgtc cagccacttc agcccggcgt gcccacgta cagcccgcac aagaagtgat 300
 gacctaatag cattggccgt cggagctcgg aggctggggt tcacggtcac gggccagact 360
 gagctactac acttctgcta gtactatata ttgctacttg ttgctctcta cagtgcgtgt 420
 c 421

<210> 3704
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-B9

<400> 3704

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 gaggaggccc tgaacgcggg gtacaggcag ggcgcgaacg gggacgccat cgggccgctg 120
 gagatccggg tgggtgcgcgg cggcacgttc gaggagggtga tggactacgc catctcgcgc 180
 ggcgcctcta tcaaccagta caaggcgccg aggtgcgtgt cgttcggacc catcatcgag 240
 ctgctcaact ccagggtggt gtccagccac ttcagcccgg cgtgccccac gtacagcccc 300
 cacaagaagt gatgacctaa tagcattggc cgtcggagct cggaggctgg gggtcacggg 360
 cacggcccag actgagctac tacattctg ctagtactat atattgccac ttgttgctct 420
 ctac 424

<210> 3705
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C1

<400> 3705

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 ggtgcaagtg caagcgcaag gcagacaaac gcggcgagaa ggagagcaga gaagcccggg 120
 gccacatccg tgtggcctgc ggccggcggc gcggttacga acgcctcgtc gtctaaggat 180
 gtggccagca gggcagcaaa atcgccatcc accgccgcgc agaagacgag gcctgctggt 240

gtcgagaagg cagcagcgtc ttctttctgta aagctgaaga cgaagcctca gaaaacaacg 300
gcaggagctg gaaaaactca agctgcacct cccgcccgtg ctctctctgg cacggtaata 360
gcaaagaaga gtacgggagc cgagaactat gtcccatcc agaagaacaa caaccgtgcc 420
ggcggcgaga ccaaca 436

<210> 3706
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C10

<400> 3706

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cgttcacctc tcttctctct cctccctgcc tgccaggag aggggaagtc agaggcacgg 120
agtggcgagc agcagacgca cgtgaaccat tgtagctgtc cctgtcgtcg tcgtcgtcgt 180
caacgaatcc acacaaggaa aggatggaga agaagccgac catcctcatg aacaggtagc 240
agctcgggag cagctcggg cagggcacct tcgccaaggt gtaccacggc cggaacctcg 300
cgtccggcga gagcgtggcc atcaaggta tcgacaagga gaaggatgat gcgcgtcggca 360
tgatcgacca gatcaagcgc gagatctccg tcatgcgcct cgtccgccac cccaac 416

<210> 3707
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C11

<400> 3707

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tcgagcaatt ataattcac agaataataa acatcatggg gcaagcctca cggctcgtcc 120
tcttcgccgt cgtggcgctg ctgtccgccg gcctctctcc gcaggcgctg ggtaagggta 180
ggggaggcag gggacacggg ggcgccgtca accgcaggt cgcggcatc tgctctcgca 240
ccccgttccc ggaggtgtgc acgtccaccg ccgggcggca cgcgtccaag taccgggtca 300
tcgacaacct ggccgtgctg aacatgcatg tggacgcgtt cgccaagcgc accgcgcatg 360

cgcgcaagca cgtcgcgagg tcggctcgca ccataccgcc gcatcagacg caggcgctca 420
cgt 423

<210> 3708
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C2

<400> 3708

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ggatcctcca tgagcgccgc aacgacctgc agggcacagt agtcctcctt ttccagccgg 120
gtgaggaggt cggatttggc gccaagagga tggtaggaggc aggcgccgtg gagaacgtgg 180
aggccatatt cgggttccac gtcacctgc tgctccccac cggcgtggtg ggctctaggg 240
ccggcccgtc gctggccggg tcggtgttct tcgaggcggg gatcaccggg ggtcggcggc 300
cacgcgcct cccccagaa catcatacac cccgtcctgg cagcctccag cgtcgtgctc 360
atcctgcaaa gcctcgtgct gc 382

<210> 3709
<211> 195
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C4

<400> 3709

taaaggtca ccaaaattaa attcaatggc catcttttta aaaagtcgtg actggaaaaa 60
ccctgggggtt acccatctta agccccctga aaaaaacccc ctttcgcca cctgggttaa 120
taccaaagat gccagcacga ttgcgccctt caaaaagttg cccacctga atggcaaagt 180
gaactcccc tgtaa 195

<210> 3710
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C5

<400> 3710

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cggaaagggc aacaacgacg acgccgacgc ggagagcccc ggcgacgcgg ccccggcgtc 120
taacatgacg ccgcccgcga tgggtgcaggc gcccgccgcg tacttcccag ctcccgcgcg 180
cgctccaacg gccgcggcgc cgcccaagcc cgggtggcggg aaccaggcgc acgaggcttc 240
cgccgatgac tcggcgctgc ggctcgccat cacggggcag gcgttcgcgt tccgcgagct 300
cgccgccgcc acagaccact tcacgccgta caacctcgtc ggtgaaggcg gcttcttccg 360
ggtctacaag ggccggctag agaaaagcgg cagacggtgg catcaagcag ctggaca 417

<210> 3711

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C6

<400> 3711

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agccggtggg cacggtgggg agcgccacgc tggcggtgga gtcggactac ttcacggcgt 120
acggcgtggt gttccggaac gacgcgccgc tggccaagcc cggcgccaag ggcggccagg 180
cgggtggcgt gcggctgttc gggaccaaga cgcagatcta caactgcacc atcgacggcg 240
gacaggacac gctgtacgac cacaagggcc tgcactactt caatggctgc ctcatccggg 300
gcagcgtcga cttcatcttc ggcttcggcc gcagcttcta cgaggactgc cgcacgcagt 360
cggtggtcaa ggacgtggca gtgctgacgg cgc 393

<210> 3712

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C7

<400> 3712

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gatggcgacg ctccagaggc gggcgggcaa gcggcgacgg cagtcccag tcgaacgagt 120

ggcggcgctcg caccctaggc tcggtggtaa cgggtgattgt gcgaggcacg ataggcttcg 180
gcagtgcagg tggtagccat gggacacgcg ggtagctccg acgggcgcgt gaggcgcggt 240
cgtctccagc ggtggtggcc acatgaggcg tggttggctc cgggtgcctt cgatgaccaa 300
ctccttcgat ctgatggcct cggcggcggc gtcctccgat gacctctcc aattctttgt 360
ttatgcatgc ggctgttggg tgagcccata ctaatttttc 400

<210> 3713
<211> 285
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-C8

<400> 3713

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ccaggacagc ctccaccggc aggtgggtaa ctttagagct gactctccat tccaccgacc 120
tatgcatct caaccaaagc gcggtgggtc cegtgcattg cattagccat acatgcatcg 180
gcacttactg tgcagttgct gcgacaagcc gattactcca atgggtcccgt gacgagcagt 240
catcgcgaca tcctccgtct acatcatcct cagctcgatc cagtg 285

<210> 3714
<211> 414
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-C9

<400> 3714

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attgggtagc cctgctcaca ctggaaggaa gaggggatct cctaggactt ctgaaagcca 180
gcatgctata gcagaggcca aaacatatgg ggaaaattca agaggcagaa agtgacaaaa 240
ctctcagagc agcattgacc gtatgagcag aatgctgaac cagatgggtc atccattcat 300
cattcataga aaaaaaaaaat gataagttcc ttgctagcgc cagacaggaa cattgcatca 360

gtccatctag gtcncttggg ttttgtgaat agagctttcc tcttttccct ttac

414

<210> 3715

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-D1

<400> 3715

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gcgccttctc tttctctccc ggacgtcgat cgtgttcttc agcacgggct agctagctcc 120

ctccctccca gccatggcga cgccggacaa caaggggcac gggcatccgc tgcccaagtt 180

tggggagtgg gacgtgaaga atccggccac gtccgagggc ttcaccgtca tattccagaa 240

ggcccgcgac gacaagaaga ccaccaccgg ccctggggct gggaacgcgc gcgcaggcat 300

tccgccggcc ttcaggaacg gcggcggcga cggcggttac aggcccgact tcggcgacgg 360

caaccagtac acgccgcccc aacggaagaa gtgggccttc tgtggctgct gaatccaaac 420

ctccctgtgc tgctgtgctg a 441

<210> 3716

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-D10

<400> 3716

ccgggtcgac ccacgcgtcc gctcgtctca tgtccgtca ccggggcggg ctcagcatcc 60

tttcgaagaa gtaacacttc tccgtgaggc ctgagcccct cgccgcggtg agccaagccg 120

gcgcacgtcg ccccggggct cagctcacc accgagcccc aaccaattaa taatatatat 180

atatagctag gatcgatcgt cagtaaaatg gcaggctccg ccgtcctgag gagccccctg 240

tccgtcctcc tctacatcct cgccgccgtg cccgccaccg ccgcggcgac gccgaccgac 300

gccgccatcg acgaggcgta cgcgcatctc gtcaagctca ccgctaacca ggagtactgg 360

gcggagcgcg cggaggcggc gcacgcgtac aaccgcg 397

<210> 3717

<211> 239
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-059-Q1-E1-D11

 <400> 3717

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 tcacgggtgca gctatacgtg gatctcctct cacacaaggt acatcatcag tcccatagcg 120
 ctgaggcgctc gaacctatca gaagtcgctg tgtccgaagc tgaagaagca gtcgctgcac 180
 cgctcatcgc aaagcttgag gagaatgtca gtgcagccgt gacagatacc gcaatatat 239

<210> 3718
 <211> 405
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-059-Q1-E1-D2

 <400> 3718

 cgggtcaagaa ttaacgggtc gacgcacgcg tccgcccacg cgtccgcgcg tccgtatgat 60
 cgaccagatc aagcgcgaga tctccgtcat gcgcctcgtc cgctagacga acgtcgtgga 120
 tctgcacgat gtgatgggtc gcatcatcaa gatatacttc gccatggagt acgtccgggg 180
 cggcgaaactc ttcgcccgcg tcgccagctg tcgggtcaac gaggacgccg cgagaacgta 240
 cttccaccag ctgcgtcggcg ccttcgactc tctgccacag ccgctgcgtc tagcagcgcg 300
 accgcaatcc cgagaacctc ctgcgtcgacc atcagggcat gctcaaagtc tccgatctcc 360
 gccgcagcgc tctcatgtag tgccagcatc aagatcgctt gctgc 405

<210> 3719
 <211> 401
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-059-Q1-E1-D3

 <400> 3719

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 ccagctcatt tgcttcgccc gttcgccgtg cgtgcgtcgt caaccaaaga ctcgtttcct 120

tctttgtgct cctgttcggt ccttccttcc ctggaaccct tccccgtaa gctcgccgct 180
 gcgctgcggt cggatggcag ttggaggcgg cgtgtgtgtg gcgtcgccct cgccgtcgtc 240
 ggctgaggcg tggctgtgga ggacgagcgg ggcgcggcgc cgcgcggccg ttaggtgcag 300
 cgctgttggc gagggcgggc cgggcgcgcgc cggcggggcg gtggaggacc cctaccggac 360
 gctgcgtctg cgccgggggg ccaccgcgg cgaggtcaag a 401

<210> 3720
 <211> 403
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-059-Q1-E1-D4

<400> 3720
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 ttangaagct gccgttccag aggcttgtca gggagattgc tcaggatttc aagacggatc 120
 tgcgcttcca gagccatgcc gtgcttgttc tgcangaggc agcagaggcc tacctggttg 180
 gtctcttcga agataccaat ctgtgcgcga tccatgcaa gcgcgtgacc atcatgcca 240
 aggacattca gctggcaaga aggatccgtg gcgagagggc gtaagtctgt cgacgggagg 300
 aagaactctg cgctcgtttt gtgtgttcgc ctctctcacc ctgtaagttt tgtgagaaga 360
 tgatctagta aactgtactt ggctgtttg actgtanccg cag 403

<210> 3721
 <211> 257
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-D5

<400> 3721
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 gtgtcactcg gagaggttgt tcggtcgagg ctgaagcagt tgctcggtat gaacatgctt 120
 acgaagaatg catttggagt cgctgccatg aatttagcga gtggaagaga ttggtagatt 180
 cagagagatg ttcgatataa cgcacaccat catggagtgt agtttgtcac ttgaggagat 240
 gaaggagcgg tttccgg 257

<210> 3722
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-D7

<400> 3722

ccacgcgtcc gcaaaaacca ccatccgtcg tcgccaaccg tagcaaggag ccaaggacat 60
caccaccgcc cagcaataat ggcgcagagc atgaggattg tggcgctggc cttggtggcc 120
ctgctggtgg tggcggcggc ggcgcccgtg gccaccgcgt acggctgcta cgacgactgc 180
tacgagcgct gcgccaacgg caagaaagac cccgcctgca ccaagatgtg caaccaggcg 240
tgcggtcca cggaccaggg cgccggtgcc gccggcgccg cgccggcttg atcgcccagc 300
gcattcatcg cttcagctcg atataatcgc tgctccgtca gcaaccaca tatgattcga 360
tcaatcttcc tctccaatt tctcgaacct gtccaaattt ttttct 407

<210> 3723
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-D8

<400> 3723

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caccaccgcc cagcaataat ggcgcagagc atgaggattg tggcgctggc cttggtggcc 120
ctgctggtgg tggcggcggc ggcgcccgtg gccaccgcgt acggctgcta cgacgactgc 180
tacgagcgct gcgccaacgg caagaaagac cccgcctgca ccaagatgtg caaccaggcg 240
tgcggtcca cggaccaggg cgccggtgcc gccggcgccg cgccggcttg atcgcccagc 300
gcattcatcg cttcagctcg atataatcgc tgctccgtca gcaaccac 349

<210> 3724
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-D9

<400> 3724

ccacgcgtcc gccacgcgt cgcacgcgc ccaagtcgc ctccgccgtc atccgctacg 60

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ggtccatcaa ccaggccagg tcgttccgct ggaacctgac ggccagcgcc gcgcgccccca 180

accgcaggg ctctaccac tacggccaga tcaacatcac ccgcaccatc aagggtcatgg 240

tctcccgcg ccatatcgac ggcaagctcc gctacggctt caacggcatc tcccacaggg 300

acaccgagac cccctcaag ctgcgcgagt acttcaacgt caccgacggg gtgttcagct 360

acaaccagat tggcgacgtg ccccccgcg ttaacgggcc actccatgtc atcc 414

<210> 3725

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E1

<400> 3725

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catggtgcgc gcagctatcg cgggggtcac gacggcgacg cgattccagg agctggtaga 120

ctggatggag gagcggaagg cggcattcag ggacgacggc aagtggacag agacggtgaa 180

tctggggctc aggagccccg cgctcatcat gttcgggctg cttcagttcg ccatcgacag 240

ggacctcggg ttcgggaaga ccagcctcgt gctgccctgg gtgcgccatg gccggctggg 300

gtccgcgtcc gtgacggtgg tgccctgcc caacggcgac gggtcgtggt tcttcggcgg 360

cac 363

<210> 3726

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E10

<400> 3726

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tgctaataac cctgcgtgcc cttcgttctc gtctcgatcc cgacgacgct cccttcggct 120

ccggcaaacc acatcaagtc gcgatggaga tgaagaaggt cgctcgccc gtcctcgccg 180
 ccgcccctc cgccaccgtg gtcctcgccg ccgaggcccc ggcgcccgcg cccaccagcg 240
 cctcctcggc cgcgttcccc gccgtcgccg ccgtgctggg cgctccgtg ctctccttct 300
 tcgcctacta cctgcagtaa aattaaagga gggtcggagg gagatgctgc tggctgccat 360
 tgcctgtatt cggttggatt ccgtttatat atatatttaa gtactttaat ttgggtc 417

<210> 3727
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E11

<400> 3727

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 atgccctcta cattctccac aagcacctgg gcgacttctt ggcaaccggg tgcacacac 120
 ccaagcaggg agcgtggca aacgagcagc tgggcaagct ttacgcacag gtgcgtccaa 180
 atgctgttgc gctggtggat gccttcaact acacagacca ctacctgggg tctgtgctgg 240
 ggcggtacga tgggaatgtg taccagcgc tgtacgagga ggcggtgaag gacctctga 300
 acgagacggt ggtgcccagag ggggtaccag agtacctccg ccccttgctc aagcagcagc 360
 tcaagctctc caggctctag tctgatcggc tccccccct ggaat 405

<210> 3728
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E12

<400> 3728

ccgggccgac ccacgcgtca ggcagagaca ggcgtcttcg tactcgcccta tctccgagac 60
 tcaaagcttt cccaattcc ccccttctc ccatttctca ccaccgccg cgctcccccc 120
 gttcaacaac accatgaggg agtgcattct gatccacatc ggccaggctg gtatccaggt 180
 cggaaacgcg tgctgggagc tgtactgcct cgagcatggc attcaggctg atggccagat 240
 gcccgtgac aagaccattg ggggaggtga tgatgctttc aacaccttct tcagtgaagac 300

tggcgctggg aagcacgtcc cccgtgctgt ttttgttgac cttgagccca ctgtcatcga 360
 tgaggtgagg actggcacct accgccagct cttccatcct gagcagctca tcagtggcaa 420
 ggagga 426

<210> 3729
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E2

<400> 3729

gggtcgagcc acgcgtccgc ccacgcgtcc gcgagcgcgt gggcgaagat ggcggcgacg 60
 agatcaagga tgctgctgcc ccgaaagaat ccgcggaggg tcagtaagat ggattcagtc 120
 tcacgacctg ctgctgctga tgttgaggag tgaccagaac cagaaccgcc gtcctcgatt 180
 ctgatagatt atcttctagt ataccttgtg ttgttgctgt tgttgctcgtc gtcgcgcggg 240
 tgtatgcgat gaagctgccca ttgctgctgt ttttaattaag cattctagat gttataccgc 300
 atgctttgtt tcggtttcta tgtcgataaa tggtaggcgg atgctgggtt tcgtgctccg 360
 agccggccac caggaagaag acctgcctgc ccttgttggt tcaacgttgt aagaatgacc 420
 tacggtgtat 430

<210> 3730
 <211> 368
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-059-Q1-E1-E3

<400> 3730

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 tcggatcaga agaaaagaat agttaggtcc cggtggtcga tcgaacgaag ctgctgctgc 120
 taccggccgg ccgggcatga cgatgacacg gacgatgtgc ctaagcctgc tgcttctact 180
 actggcggcg gcgtcgacag cgacggcgca tttcacggtc ggcgatgtgg atgagtacgt 240
 gtccaagcgc acgcaggagt cccgccacag gaacaacggt ggcgcgggca tcgatgacct 300

catctccagt gcggcgcgct tccacgccaa cgtggatgca cgcgcctatg gccgtagatt 360
ccgactgc 368

<210> 3731
<211> 293
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E4

<400> 3731

gggtccagca cgcgtccagg acgagttccg cacgttcggg gttcttcgca gtgtctgggt 60
tgctcggaaa ccacctggct ttgcgtttat tgattttgat gataagaggg acgcagagga 120
tgcaatccgt gacctagatg gtatgtgac aatgtattgc tgtcaacatg ttataaacct 180
ctattgggat gttgtatcag atgtttatat gacattccat atgttgtcgg tgttatttgt 240
gaagaatatc tgagttggta ctaaattaca ttcagagctc tatttggtat aaa 293

<210> 3732
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E6

<400> 3732

ccacgcgtcc gatccgcaga gactcggaag tcggaaagaa tccctcctgt tcttcgtcaa 60
ccctccagaa cctgctctct ctctctctac gagactacga ccgtgtaagg acatggccgt 120
cgagcgcttg aagaccgggt tcgagcagtt caaggccgac gtctacgaca agaagccgga 180
gctgttcgag ccaactcaagg cgcaccagtc gcccaagtac atggtgttcg cctgctccga 240
ctcccgcgtg tgcccgtcgg tgaccctggg cctgcacccc ggcgaggcct ttgccgtccg 300
caacatcgcc agcatggtgc cgccttacga caagaccaag tacgccggcg tcggctccgc 360
catcgagtac gccgt 375

<210> 3733
<211> 421
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-E7

<400> 3733

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tactttttgc cttgttggcg accctgctca gcgtcggcga cgcgttggtc gtcgacggcc 120
tgcaggtggg gttctatgga aagacgtgcc cggcggccga aggcgtcatc agcgacatcg 180
tcaacaacga aatcgctatg gaccggggca tctcccctgg cctcattcgc ctcttcttcc 240
acgactgctt catcacgggt tgcgacgctt ccattctcct ggacgagtcg cccgccggcg 300
acgtcccaga gaaggagtcg tccgccaacg gcttcaccct ggtcgggctc agaaccatcg 360
acatcgccaa gtcccacgta nagggcatgt gcccgggcaa ggtctcgtgc gcagacatcc 420
t 421

<210> 3734
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E8

<400> 3734

ccacgcgtcc gcggacgcgt ggaaaaaacc agcagctagc tagcgatggc tggagcctgg 60
gcactgctca tcgtcctcgc ggctgccgtc gcggctcctgg ccgcgcggcc ggcgctctgca 120
ggcgggggag ccgcggcggt ggcgagatc tgcataaaga ctccgtcccc cgacctgtgc 180
accaggacgg cggggaagca cgccaacaag tacaaggtgg tggacgcggt gacggtgcta 240
gagatgcagg tggacgcgtt caagaagcgc gtgaaggcgg cgcggaggct cgccaaggag 300
gaggtcaaga cggccgcgac gcccgaggcg cggagggcgc tgaacctctg caagacctac 360
tacctggacg ccgccgacaa cctcggcgcc tg 392

<210> 3735
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-E9

<400> 3735

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cgaagcttcc gccggaggtg ctggccaagc tcccgcccga cgtgctggcc agcatcccg 120
cggagacgct ggccaacatc gcggcgtcgc aggggcagct gcagacgagc gagatcctgg 180
ccaccatccc ggcggcgcag gcgcagggcc agctgccggc ggacctgccg ccggaggtgc 240
tggccaagct cccggccgtg cagagccaac tgccggccaa cattacgccg gagatgatga 300
ccagtctcgc cgccgtgcag cagcctgccc ctgctggcca gcctggggcg gccccggctc 360
tcccgcccga catccctcag atccccaaga tgcccacct ctcccggct 409

<210> 3736

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-F1

<400> 3736

attaccgggt cgacccacgc gtccggggcg gctcagcatc ctttcgaaga agtaacactt 60
ctccgtgagg cctgagcccc tcgccggggt gagccaagcc ggcgcacgtc gccccggggc 120
tcacgtcac caccgagccc caaccaatta ataatatata tatatagcta ggatcgatcg 180
tcagtaaaat ggcaggtccc gccgtcctga ggagccccct gtccgtcctc ctctacatcc 240
tcgccgccgt gcccgccacc gccgcggcga cgccgaccga cgccgccatc gacgaggcgt 300
acgcgcatct cgtcaacctc accgctaacc aggagtactg ggcgagcgc gcggaggcgg 360
cgcacgcgta caaccgcgcg gcgtaccaga ccgacct 397

<210> 3737

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-F10

<400> 3737

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cgacacgcag cgccgcctgc tgtcccgcct cgctccgac tggctcgccc tgctcctctt 120
caagtccgcc tacctcctcg cgctcctcct gctctcgctc ctctccgtcg ccgcctccgt 180

agtccatcgg cttggcaaag gagctcgct gcctctgaac caattgacta acatgcatat 360
attatatata taatcactct tcggtacctc tccccctctc acgtaatctc aagtctccac 420
cgaatatata 430

<210> 3740
<211> 237
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-F5

<400> 3740

ttgcaaaacc ctatagtgag tcgtattact gagctatcac ttctccgtga ggcttgagcc 60
cctcaccgct gtgatctaga gcggcccacg tcgcctcggg gatcactctc actaccgagg 120
cccacccatt tagtactata tatatatctc taggatcgat catcactaca ttggcaagct 180
cctccgtcct gaggagccta ctgtccctcc tcgtctacat cgtcgccggc gtgccccg 237

<210> 3741
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-F6

<400> 3741

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gccgcagcta ggtgccccgg ccaacgcccc ctcccaacgg caagccggtg cccctccgcg 120
gcgtgcagcc atggctgcc acccgcagcc gccgcggttc gttaccctgc tcgaccggcc 180
ctagcccttg cgcgcggtcg gctgcccagc gcggcggcgc gaccagctag cactatcgtc 240
gtcatgctcg tgctctcgtc gctcgttcgg tgcgtcgtgc acgcaacatg tcgtcgtacc 300
tcgcctcgtc tcgccgtcgt cgcgaggtac ttgatatatg ttgggaatga ggggagtagc 360
agcacg 366

<210> 3742
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-F7

<400> 3742

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ggtaggatgg acgcggacca gcagggcggtg gttgcggcgg cgggtgaagcc ggcgctggcc 120
aaggggacgc cgtcggcgctc gttccggctc cgcaacggga gcctgaacgc ggtgcgcctc 180
cgccgcgtgt tcgacctgtt cgaccgcaac ggggacggcg agatcacctg ggacgagctg 240
gcgcaggcgc tggatgcgct gggcctggac gccgaccgcg ccgggctgtc cgccaccgtc 300
ggcgcttacg tgcccgaagg cgccgcgggc ctccgcttcg aggacttcga caagctccac 360
cgcgcgctcg gggacgcctt cttcggcgca ctgggaggcc aggacgacgc caccgccg 418

<210> 3743

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-F8

<400> 3743

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gcaaaacacc ttcgccggcg agagcatggc gatggcgtag cgtgtcctgg aggtcaccct 120
ggtgtcggca aatgacctca agaaagtgtc gctcttctcc cggactcgca tctacgccgt 180
ggcttccatc tccggattcg acctccgcat cccttccac agcacccaag cagaccacag 240
caacggctgc aacctctgct ggaacgccgt ggtacacttc cccatcccgg ctgccgctga 300
caccgcgggc ctgcactcc acgtgaggct ccgcgcccag cgtctatacc tgggcgatcg 360
cgacatcggc gaggtgtttg tgccc 385

<210> 3744

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-F9

<400> 3744

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gcggcgcgga ggctcgccaa ggaggaggtc aagacggccg cgacgcccga ggcgcgagg 120
 gcgctgaacc tctgcaagac ctactacctg gacgccgccg acaacctcgg cgcctgcaag 180
 cgcgccatcg gcttccgga cgccgtcacc atccgcgcca cgatgagcat ggtggcgag 240
 gacacgcaga actgcgacga ggagttcagg aaggccgtct ccaagaaccc catggaggac 300
 cacaacaggt cgctcatcga gatgtccgag atctgccgca cgctctccaa catgatccct 360
 tacgaacatg tccattgatt tgtttgtttc tttttccga cccctacta cgttcggtaa 420
 cgtcgtc 427

<210> 3745
 <211> 305
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G1

<400> 3745

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 cgacggcatc agtgagggcg cacgctaagt ggcgccggca agccttgccg cgaggacatg 120
 tcagctgctc cgcatgtcga caccagctat cggatcatccg gtgagctgaa gtatctcagt 180
 cctgagacat catctcttca tggcttcgca cccaaagact gagtctccga tagctcgctt 240
 aggcggcagt ttcgcaagca cgtgcgcgat aatctcaagg caggttccaa ggtggccggg 300
 ctcac 305

<210> 3746
 <211> 418
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-059-Q1-E1-G10

<400> 3746

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 tcttcctcgg acaaagccgg ggccgttcgg cgggaggcag gggacgcacg ggcaggcagc 120
 catgaacggc atcaacccca acggcggtt cctgtcgtac gggaacatgg agagctacgc 180

gatgtgggtg gcgaccggcg tggcgtcggc cttcttcgcg tccctcgagc gctgctcctg 240
catccacctc cacaccggcg aggacgacgg cgacgaggag gaggaggacc tcgaggaggc 300
ccgcccgtcc ttctcccgcc cgatccctga gtactactac gaccggtcgg gctcctccgc 360
ctccgtcgcc aagatgtgac ctgaccggac cgcgctctcc ctccgcccac gaaatgcg 418

<210> 3747

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G11

<400> 3747

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ctattgcaca agcagagtat atatcctgca aagatactga aactcaactt tcgtgagagg 180
aaggagaacg cttgggaaga ttcaggctca gatgaacttt ctgtagtggt tcttggtggt 240
atcgcgcgct ttgatgggtg tgaccttcag gctttctgtg catgttcaag gataagaact 300
gaattcttgg ttgctcacag aacgttctta aaaaagcatt tcaagatgta aaatcacgcc 360
tgtggaaaga taagtttgaa gagcaagatg ctgaggatga ggaaactttt ggacgaatac 420
ccttt 425

<210> 3748

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C10

<400> 3748

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gtggccttgc tgagcgtggc cctagtgggc ctgctcctct gccacctgc caccaccgcc 120
tccgcccacc agaaagacat ccacgtcctc ggcagcgtcg acggctccag cgacggcagc 180
agccccgagt ccgaaggccg cgtcgtctac gcggacatga agctggctga tacggaatcc 240
gatgcgcgg cgccggcgcc ggcgcgggg ccgtcgtccg gttgaactga gaagcgtgcg 300

tccagccaag caaggtgggtc aaaaccgaga actaattaag ggctcgattg tgtgtccggc 360
tactactgtt cttgccataa ttatatatag atacgcaaa 399

<210> 3749
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C11

<400> 3749

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cgacgccgtc gccgccggag cggccgtttg ctgcgcaggg cgggcctcgc tgtcttctag 120
caggaagcag cagcagcagc ccgacgacgc cggctgcggc agcagcagca gcgacgacca 180
ctaccagcac gacgtgatca tgctgaggcg gacgaggagc gggcgggcat tcccgccgcc 240
gatctccgtg atcggcaagg gcgggcggcc gtggctctgc ctgcgggcgc accgcgaggg 300
tggacgcctc gtgctgcggc agatgcgcct gccgtcgcag gagctgctgc agccctgcaa 360
ggaggacggc aggttcaagc tcctcatgca c 391

<210> 3750
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C12

<400> 3750

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ctcctggtcc tcttctgcat cgtgcatggt gagaaggaag agtcaaaggg catcgatgcg 120
aaagcgccg ggccctggtgg gtccttcgac atcaccaagt tgggcgcctc cggcaatggc 180
aagacagaca gcacgaaggc tgtgcaggag gcatgggcat cggcgtgcgg cggcactggg 240
aagcagacaa tcctcatacc caagggcgac ttccttgctg gacaactcaa cttcacaggc 300
ccttgcaagg gcgacgtgac catccaggtg gatggcaatc tgctggcgac cacggaccta 360
agccagtaca aggaccatgg taattggatc gagattctac g 401

<210> 3751

<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C6

<400> 3751

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cccactgaat cactgatcgt tgatcagtgt tccaatatTT tggcaagtgc agctttgaat 120
aaattgaaca gattggcctc gtggccattt tcttgtattt atctgtagtc aggtccaatt 180
cttttctgtt ggtgagcgca agttattcat agatgactcg gtcattgggaa tatttgaat 240
attatgtcat gtatcgtaa atttcagttg ttttgtttca gctgccagaa ctgttagcaa 300
gagtattctg gagctggaag ctgcaacgca actgggttga tctatatact tgaatgccga 360
ataaaggacg ggcaataaac tgcagcgaaa tatgtgctgt cagacattgt tgaaaaacca 420
atgtatggga aattgagtgg atc 443

<210> 3752
<211> 400
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C7

<400> 3752

tacaacaccc tatagtgcg tegtattagg cgtccggcag agatgcttcc cactgaatca 60
ctgatcgttg atcagtgttc caatatTTtg gcaagtgcag ctttgaataa attgaagaga 120
ttggcctcgt ggccattttc ctgtatttag ctgtagtcag gtccaattct tttctgttgg 180
tgagcgcaag ttattcatag atgactcggg catgggaata tttgtaatat gatgtcatgt 240
atcgttaaat ttcagttgtt ttgtttcagc tgccagaact gttagcaaga gtattctgga 300
gctggaagct ctaacgcaac tggttgtatc tatatacttg aaggcctaataa aaaggacggg 360
caataaactg catcgaaata tgtgctgtca gacattgttg 400

<210> 3753
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C8

<400> 3753

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tgctacggtg gtgctccgtg ggcagaagac gaggaggtgc gccgcctcag cgtgcggatg 120
caggcggttg aggcagaccg tgagtccatg aggcaagcca tcatgtccat gggagccgag 180
aaggcgcagg tgatgctgct caaggagatc gcgcagaagc tctgcaagga cacgacacca 240
ccagttccag cggcagcagt ggctcagcac agctttttaca aagggggcaa cacacagccg 300
gccatgacca tcaactgtgcg accaccacgg caccgggctt tgcttatgca aaggaaactg 360
gtgaagaaga agccatcact ccttgctgca gtggtcaagt gggttacatc aatcatg 417

<210> 3754

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-C9

<400> 3754

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gtcaaacatg ctcaggagga ggctctctcc tgctctacct gtctgctccc ggctccactc 120
tatctctttc gccatacgcg cgagacggag gataggaaac agctaccatc gagcgaagaa 180
caaacagggt gcttcacacg tgcattgctag atcaattccg atcgctcgcc ggcgggaatt 240
gaactaacga cgacctactt gcaaccgggg cgggcttttg attaataatt ccggcatgac 300
caatgggcaa attccattac ggcttggtgc cccacggcac gttgtttctg gtggaccact 360
acggctcggc agcagca 377

<210> 3755

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D1

<400> 3755

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aatcatagta gtgccgcacc gccgttccta gggttccaga gaccagcaag acaaacctcg 120
cgtggcacct gcgtgccgtc ctgcagtaac gcgccagtag aagcttgctc catcggtctg 180
cgtcgggtgac ttctccctct tcgccgcgtt cgtcgagcga ggtcacgagt cacctgatga 240
gcaagttggt acctggaatc tcaagtccca ggtcaagaac aggtaccgca cgatgaggcg 300
catggaggat gctgcgatga gtctgtgaga gatctaggcc gtcgtctccc agtcaacttt 360
gggttgctgg accgttgctc ccttataatg taattattta tttattttgt atagaactcc 420
tattatgtag taaagatgtg acattcg 447

<210> 3756

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D10

<400> 3756

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tccgcccggc cgccggctcc tccgccgact ccggccgggg ccacggcgcg gttatgatcg 120
gtgattcgag gacgcgcgtt gctgctctgc ggctgggagg atctagccgg agagagttat 180
tatctgtcac aatggcctcc agagatcaca ctggcttgac ccgacaactt cttgattttc 240
aacatgatac aatagatgag gtaggcgcag gacatgaccc attcattgat ttgaaagcga 300
gattcatgga ctttaaacag agaaactatg tggaaaaatt ttcaaattac caaacccttg 360
ctgagcagca aacaccaaag ttcattggtg ttgcttgtgc tgactccagg gtctgcctta 420
ccgctgttt 429

<210> 3757

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D11

<400> 3757

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ggccgccggc tcctccgccg actccggccg gggccacggc gcggttatga tcggtgatcc 120

gaggacgcgc gttgctgctc tgcagctggg aggatctagc cggagagagt tattatctgt 180
 cacaatggcc tccagagatc aacttggtt gacccgacaa cttcttgatt ttcaacatga 240
 tacaatagat gaggtaggcg caggacatga cccattcatt gatttgaaag cgagattcat 300
 ggactttaaa cagagaaact atgtggaaaa attttcaaat taccaaacc ttgctgagca 360
 gcagacacca aagttcatgg tggttgcttg tgctgactcc agggctctgcc ctaccgctgt 420
 tttgggg 427

<210> 3758
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D3

<400> 3758

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 ggtaccctcc tgaagcccaa catggtgact ccaggctccg actccaagaa ggtgaccctt 120
 gacgtgattg ctgagtacac cgccgtacc ctccagagga ccgtacctgc tgctgtgcct 180
 gctgttgttt tcctctctgg tggacagagc gaggaggagg ccacccgcaa cctcaatgcc 240
 atgaacaagc tcagcaccaa gaagccgtgg tcctgtctt tctccttcgg ccgtgccctc 300
 caggcgagca ccctcaaggc ctgtgctggc aacgtggaga acttgagaa ggctagagct 360
 gccttcctcg ccagggtgcaa ggccaactct gaggctaccc tcggcaccta caatggtgat 420
 gctgccgccg acac 434

<210> 3759
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D5

<400> 3759

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 agcgtggcc acgatgacga ctaataagcc cctcctctc ctgccttg cgccgcgt 120
 ccttggtgcg gcgccggccg ccgcgaacgc gcccgcggg gcgttcagca actgggtggc 180

gatgaaccat cagagctacg cgctgtacgc gcagaagtcc gtcggggacg ggggcaagga 240
 gccctggac aagaagctgt cggaggcgga gaagaataag gtcacgtacg tggaggacc 300
 cagcggcaag ggcgactaca ccaacatcac cgcgcgctg gaggatatcc cggtagcaa 360
 caccaagcgc gtgatcctgg atctcaagcc cggcgctcag ttccgcgaga agctgttcct 420
 gaacatcagc a 431

<210> 3760
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D6

<400> 3760

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 ctgcgtagcc tcgtcgcgt ggtcctcgtg gccacggcca tagccgccgc tcccggcggt 120
 gggtttgcg tcaccggccg catctactgc gacaactgcc gcgccgggtt cgagacaaac 180
 gtgtcccacg ccatccaagg cgcgacggtg gagatggagt gccgccactt caagtcgcag 240
 caggtccacg acaaggcgga ggcgacgacg ggccccggcg gctggtacag gatggagatc 300
 agcggcgacc actaggacga gatctgcgac gtgcgcctgc tcaagagccc cgaggcgga 360
 tgcccgaga tcgaccactc ccgcgaccgc tgccgcgtcc cgctcacgcg caacgacggc 420
 atcaagcaca gcggcggtccg cta 443

<210> 3761
 <211> 350
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D8

<400> 3761

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 agaggattca tatgagcggg aaaataggcc aagtatgtag agtgatctgt cttgtataga 120
 aagcaggcaa aaaggtccaa tgtatatgtg gaacgtagca tcttcagttg tgctaggcct 180
 ccattctttt tttttcttgt ttggatgggc cttttgcttc ttcgtagctg ctgtatcatg 240

tatgtcccca ttgagccatg agttgtaaaa tattaaattg aaggtgcttc ttccataata 300
 aaataagcaa gataaaaaaa aagttatcag aaaaatttaa aaaagtaaaa 350

<210> 3762
 <211> 337
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-D9

<400> 3762

cggtcgacc cagcatccg atttctgggc agctaattca ttcattctgta cagttagaga 60
 ggattcatat gagcgggaaa ataggctaag tatgtagagt gatctgtctt gtatagaaaag 120
 caggcagaca ggtccaatgt atatgtggaa ggtagcatct tcagttgtgc taggcctcca 180
 ttcttttttt ttcatggtt ggatgggcct ttgcttctt cgtagctgct gtatcatgta 240
 tgctccatt gagccaggag ttgtaaaata ttaaattgaa agtgcttcat ccataaaaca 300
 aacacagtca cgaaaaccct ttttttattg agcagtg 337

<210> 3763
 <211> 439
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-E1

<400> 3763

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 catcaccgag aaatctaata actcgttgct ctctgtcttc gctccgcat cgatccagga 120
 gggggaagca gaaggaggga tggcggagaa cccgcagctg tttgggaatg ggatgccggt 180
 gccgttctac agtgagatgt tcgtcctcgc ccgggatggc gtcgagttcc acgtcgacaa 240
 gatcccatca gtccttggtg gtcattgtgaa aacaaaaggc acaatttacc tgtctaatat 300
 aaggatggtg tttgttgcca acaagcatgt tggcaacttc ttgtcttttg atatgccact 360
 gttgtttgtg cagggtcaga agttcaatca gccaatattt cactgcaaca acatctctgg 420
 attcgttgag ccagttggt 439

<210> 3764

<211> 446
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-E10

 <400> 3764

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 aacgagtccg gcggccagaa cgagcgcaag tacgacaggt tcgacttcat cccggccaag 120
 cacggccgct acgtcgggtca gctcacgcgc ttcgccggac cactcaagtg catcgtcggc 180
 cagccgtgct agtagacagc ggcccggtcg ggcacatact cctcttccta tatacatcgg 240
 atttggatgg gcggcatata tgtacgtgtg tgtaatatat tattactaca tcttgtacta 300
 tatgcgacga ttgcttgact gatgaatcac gctttttagg ttagaccaat ttagaaggga 360
 attagagtgg attaaattcg ctcccggtaa aaaatgactc gaagaaaatt tagggactgt 420
 ttggtttgtg gttaaattgtg ctacac 446

<210> 3765
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-044-Q1-E1-E11

 <400> 3765

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 gctactctcc tcgagcgcgg cgcgagcac ggggacatca aatggcggca gcggcggaga 120
 tcggtggttt cgcggcggcg agagtggcgg tggcgacgct caggccggct gcgcacccag 180
 ccccggcggc ggcggtggca ccgcagccta ggagggcggt ggcggcgag tcgctgcaga 240
 cgaccgccac cgaggcgctg acggcggatc tcgccggcac gaccaacggc gctgtgcatg 300
 ctcggatgaa tagtaaggct acaagtgaat tcacttcaca ggcagttact gcaaattcta 360
 ggagaaagac aaagatagtc tgcaccatag gtccctcaac caacactcgt gagatg 416

<210> 3766
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-E12

<400> 3766

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cttcaatcca ccgtcagtag atgcgggtcca gttcatttca gtggttcaat gaggcggaca 120
tggtcatcag cgtgcaacgg tctctaatac agggacaatc ctctgtggatt accttaactt 180
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tggtccctt taatttcac catggcattc ctggtttgta accaaatgtt ccaatttcac 300
ctccgacgcc aatgttaagc tggaatgcaa ggaatttggc cacggcaagc tcaaacgctt 360
caacgaacgg gttaccgaac ggaaagggac 390

<210> 3767

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-E5

<400> 3767

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gccacggcaa atcagcttcg ccggcgagag catggcgatg gcttaccgtg tcctggaggt 120
caccctgctg tccgcaaata acatcaacaa agtgctcgtc ttctcccgga ctgcacatca 180
cgccgtggct tccatcgccg gattcgacct ccgcattctt tcgcacagca ccaagcaga 240
ccacagcagc ggctgcaacc cctgctggaa cgccgtggta cacatcccca tctcggctgc 300
cgctgacatc cggggcctcg cactccacgt gaggtccgc gccacgcgtc tatacatggg 360
cgatcgcgac atcggcgagg tggtttgtgc catcgacgac ctctgggccg gcgccgacaa 420

<210> 3768

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-E6

<400> 3768

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ggatccctcg ctaataacat catggctcgtg ggtgtcgtcc ttgcagcgt cgtcgccggc 120
 gggcatgctg gggcccgaa ggtgccgcc ggtcccaaca tcaccaccaa ctacaacggc 180
 aagtggctca ccgccagggc cacctggtac ggtcagccca acggtgccgg cgctcctgac 240
 aacggcgggtg cgtgccggat caagaacgtg aacctgccac cctacagcgg catgacggcg 300
 tgccgcaacg tccccatctt caaggacggc aagggtcgtg gctcatgcta cgaggtgaga 360
 tgcaaggaaa aacctgagtg ctccggcaat ccagtcacgg tgtacatcac tgacattaac 420
 tacgagccta tcgtcccta ccacttcgac 450

<210> 3769

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-E7

<400> 3769

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 cgagttggag atgggtccat tctatcaata tggcatcact ctaccattca tggggttgctg 120
 agcgccacca cgtgcatcat ggatcctttt tccagcgcac cagctttgat cagggattca 180
 catgtagggt tttatgatac ggtcagatct accgtcaccg cgagactata tacgctagtg 240
 catatgggat tgggattgta ctacatggaa caagttctgt ggaatcgctt gtcgttacgt 300
 ctagatcata cgaggcagtg ccggctgctg ctcatgctca gatgtgagat tcttggcatg 360
 actacaatgc tcgggatttc aatctctgtg tatatcactg acattagcta cgag 414

<210> 3770

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-E8

<400> 3770

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 tcgtcgccgg tggctacgtc cctgggtccc ctttctacgc cagggtctc gatctctcca 180

ctctgaatgc caagcggaga gccgtcgcta gtctgcaca cctccgcgcg atgtggatgc 240
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ggggctcaag taattgctcg ccggaacttca catccgcgcg tgtgcctctc tacgtcgagg 360
agcgactcca acgtcgctc tatgccgagc gaggacacgt gtcattctgaa aatcatgttg 420
gtacctggat tctcaagt 438

<210> 3771
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F1

<400> 3771

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tgctggctgc catgctagcg gtggccgcgc atgtcgccaa cgccggccac gccaaagcccc 120
tgacgcctgg cgggcgcgtg gtacacgaca accacggcaa gttcacggcc gggccgtgga 180
aaccagccca cgcgaccttc tacggcgggc gggacgggtc cggcaccacg gcgggcgcgt 240
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tgttgtttgg cgacggcgcg gcctgcggcg ggtgctacga ggtgcggtgc gtggacagcc 360
ccagcgggtg caagccccgac gcggcggcgc tgggtggtgac ggcgaccgac ctgtgcccac 420
ccaaggacaa gtggtgcaag ccgcgc 446

<210> 3772
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F10

<400> 3772

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agaggcacgg agtggcgcag agcagacgca cgtgaacat ttagctgtc cctgtcgtcg 180
tcgtcgtcgt caacgaatcc acacaaggaa aggatggaga agaagccgac catcctcatg 240

aacaggtacg agctcgggcg cacgctcggg cagggcacct tcgccaaggt gtaccacggc 300
 cggaacctcg cgtccggcga gagcgtggcc atcaaggtca tcgacaagga gaaggtgatg 360
 cgcgctcggca tgatcgacca gattaagcgc gagatctccg tcatgcgctt cgtccgccac 420
 cccaatgtcg tgcagctgc 439

<210> 3773
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F11

<400> 3773

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 attaaatcac cgccaccacc ggtgccggtg aggtcacctc catcgtcagt gaaatcaccg 120
 cctccttcac cactgttaag ttgcgcgcgc ccaccagcgc ccgtgaggtc acctccaccg 180
 ctaacgaaat tatcacctcc tccaccaccg ataaggtcgc cccccccacc acaagcatac 240
 tcacctcctc catcagctcc aataagctca cctcctcctc cgatgcaatc cctccaccg 300
 cctgctccag tcagctcacc accaccacct ataaaatcac caccaccggc tccagtaagc 360
 tcaccacctc ctctggcgca atccccctca ccacctgctc cagtcagctc actaccacca 420
 cctggtaaat cacctcct 438

<210> 3774
 <211> 133
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F5

<400> 3774

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 gaaacacata aaaagaaaaa aaaaaaatta cacatacata caaaaatcgt caatcgggtg 120
 gccgccaac agg 133

<210> 3775
 <211> 431
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F7

<400> 3775

ggccaagaat tcccgggttcg acccacgcgt ccaccagaat atgccatgac tggacagctt 60

agcacgaaga gtgatgtcta cagctttgga gttgtgctgc tggagctttt aaccgggtcgc 120

aagccagttg accacacact gcgccgtggc cagcagagcc ttgtgacatg ggctacaccg 180

aggcttagtg aagacaaggt gaggcaatgc gtcgatccaa ggctcggaga cgaataccct 240

ccaaaggctg tagccaagat ggctgctgtg gccgccctct gcgtgcaata cgagggtgaa 300

ttccgtccca acatgagcat cgtcgtcaag gctctgaacc ccttgctgca cagccggtct 360

ggcaaccgcc ctactgcctc gtcggcctcc cagcgtgccg agcgatccgg actgtgaatt 420

ctcatcgtg c 431

<210> 3776

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F8

<400> 3776

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cctccagtca ggaggagtgc aaggatcaag aagagaacac gggggacatt ctggaggaga 120

agcgtgacgg gaaggacagc gaagacctga gcagcacagg cgacaaggct tgtgtcgggc 180

tcggggagcag tgatataaac atcccgatgg aagaagcggg tgatgaacct gttaaaccgg 240

cggaagctgt ggacgaagct gggctgaaga gagatgtctg ctgttcacca gctgagccaa 300

acgaagccgt tggtcagaac gagctcaatg aggctgctgt cgtcggtgaa acgacgactg 360

aaccgaagga ggctgaggat gaagccaaga taataaagca agtcgactgc gaaactgcat 420

caaaagaagt tgctagtact ggggccgag 449

<210> 3777

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-F9

<400> 3777

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tacgtcctcc accgcgtcgc cgccggccgg cctctgccc a gcccgggctg cctgcgaggg 120
cttctgatgg ccctcgacgc cgtcctttcc tctagtgcc cagctttatt gcagatccag 180
ccctctgac ctcgtcttct ttcacctctc caacatgaag gtcaacacca agatcaagct 240
ggagccggtc atggcgccgt cgtcgtccct gccgaggagc gccagcgagc taccggaccc 300
gccgtcaccg ttcagctcca acacggcgca ccaccccgtc tccgtgccc a cçacacctag 360
gttgctctta tcgtgctcgt cgttcggcca catggtgacc ccgcccaccg acacaccgcc 420
g 421

<210> 3778

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-G1

<400> 3778

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tacagctggt catgagcgcc cgcccaacca tggcgggcggc ggcgcccgtg cgcgcctgcg 120
tggtggcgct ggcgctggtg ctggcgtgcg cgtgctcca gccgaggccg tccgacgccg 180
cggcgcgacc cgccccgcag tcgccggcga cggcgggtgtc gtcggggcgcc gccaaagccca 240
agtgcgtggc cggcgccagg aacgaccacg cgtgctgcgt cggcgccgtg cagcaccggg 300
acagccagga cgaggagggc tccagcgtca ccatctacgc gcccgccgcc gcgcccgcgc 360
acgtcagcca cgacgacggc agcgactaca acgatcccga cgtgcccac aacgaccagc 420
tcgtcgtcgt cgggcac 437

<210> 3779

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-G11

<400> 3779

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cgcgacagcga ttgccggcga tggcgagcct caccctgccg ccggcgatgg cgaaccacag 120
gcaggacgcc atcgacctcc aaaaggcctt caaagggttt ggctgtgaca gtacaacagt 180
gataaacata cttactcatc gcgattcagt gcagcgtgga ctcattcaac aggaatacag 240
ggctatgtat catgaggaac tctcccatcg catttcatct gaactcaatg gaaaccacaa 300
gaaagctatg ttgctgtgga ttcttgatcc tgctggacgt gatgcaactg ttttgagaga 360
agctctaagt ggtgacacta tggatctgag agcacccaac tgatatatat 410

<210> 3780

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-044-Q1-E1-G4

<400> 3780

acccaagcgt ccatcgagat tctacgcgtg gataacctgg tcatcaccgg caagggaaac 60
cttgacgggc agggcccagc cgtgtggagc acgaactcct gcaccaagac gtacgactgc 120
aacatccttc ccaccgcct ggtcaccatg gtcataatcc ccagcaaggc tgccgctgac 180
acccgccgac tctcaactcca cgtgaggctc cgcgcccagc ctctatgact caccattgc 240
gacaaccacc aggtgttcat ccgcaactgc tacatcaagg accacgacgt gctagcccgc 300
catatcgacg ccggcaacgg cgtgggcccgc cccgcgggcg tgctcatcaa cggcaanggc 360
ggcaaggacc tggaggccgc gctgccttc accttcgang ccggcaagac gtaccgcctc 420
cggtctgc 429

<210> 3781

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-G5

<400> 3781

ccacgcgtcc ggctaggata agcacaaacg cgtgcacgcg ctgacgccga cgtaagggtg 60

tacggtaact cggagcgtca teggagagag agacccgccca ccgccacgct tgaccgtaat 120
 ccgtgggagag tgagtgtccc gcccgggtac cagctaagac acgacgggtcc atccagccat 180
 cgggtggccca gcagattcca caatggcggc aacggcggac atggagcggga tcttcaagcg 240
 gttcgacacc aacggggacg gcaagatctc gctgtcggag ctgacggagg ctctgcggac 300
 tctgggggtcc acctccgccg acgaggtgca gcgcatgatg gccgagatcg acaccgacgg 360
 cgacgggtgc atcgacttca acgagttcat caccttcagt aacgccaacc cgggggtcat 420
 gaaggacgtc gcaa 434

<210> 3782
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-044-Q1-E1-G6
 <400> 3782

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 catatatata ttcttgccaa gataaaggta atggagtcgt cacgcaggtt ccagccggcc 120
 gtcacctctgc ttctcctgct cattgtgtcc accgatatgg cacaggcaag ggaatgacgac 180
 aagtacagtg agcgatttgt tggggcatgc atgatcgag acaactgcgc caatgtgtgc 240
 cgcggtgagg gcttcttggc cggcatgtgc agcaccttcc gccgccgctg catctgcact 300
 aggcagtgc aaacaagatc gctcgatcgt tcgccatgca tcgacaacct attcttaata 360
 acgttcatta tctcgttctt atttatgacg aatgtcatgt atgttctggt gactgtcatg 420
 tatattctga tgac 434

<210> 3783
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-044-Q1-E1-G7
 <400> 3783

tcacgggtcg acccagcgt ccaagatcac tacaagatgg catgcacaaa caatgcgatg 60

agagccttgt tctcctggt cctcttctgc atcgtgcatg gtgagaagga agagtcaaag 120
 ggcacgcatg cgaaagcgtc cgggcctggt gggtccttcg acatcaccaa gttgggcgcc 180
 tccggcaatg gcaagacaga cagcacgaag gctgtgcang aggcattggc atcggcgtgc 240
 ggcggcactg ggaagcagac aatcctcata cccaagggcg acttccttgt cggacaactc 300
 aacttcacag gcccttgcaa gggcgacgtg accatccagg tggatggcaa tctgctggcg 360
 accacggacc taagccagta caaggaccat ggtaattgga tcgagattct acgcgtggat 420
 aacctggtca tcaccggc 438

<210> 3784

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-G8

<400> 3784

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 cgcacaaacg ccgtggcttc aatctccgga ttgcacctcc gcatcccttc ccacagcacc 120
 caagcagacc acagcaacgg ctgcaacccc tgctggaacg ccgtgggtga acaacgggga 180
 ggtgtccggg gtcacgtgc tcaactccaa gttcttccac atgaacatgt accggtgcaa 240
 ggacatgctg atcaaagacg tgaccgtgac ggcgcccggg gacagcccca acacggatgg 300
 catccacatg ggcgactcat cggggatcac catcaccaat accgtcattg gcgtctgcga 360
 cgactgcac tcacatcggac ctgggacctc 390

<210> 3785

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-044-Q1-E1-H1

<400> 3785

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 tccggcctgg cggtgagcga cgagtgaag gtgaagtcc gggatctgaa ggcgcggcgg 120
 agcttccggt tcacgtgtt caggatcgac gacaaggaca tggagatcaa ggtggaccgc 180

ctcggcgagc cgaaccaggg ctacggcgac ttcaccgaca gcctccccgc cgacgagtgc 240
 cgctacgcca tctacgacct cgacttcacc accgtcgaga actgccagaa gagcaagatc 300
 ttctttcttct cctgggtcccc tgatactgca cgcacccgga gcaagatgct gtacgccagc 360
 tccaaggaca agttcaagan ggagctggac ggcattccagt gcgagattca ggccancgga 420
 cccagcgaga tgagcctcga cat 443

<210> 3786
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-H2

<400> 3786
 tccccgggtcg acccagcgt ccaacctatc atgaacttgt cgcccttctc ccggactcgc 60
 atcaacgccg tggcttcaat ctccggattc gacctccgca tcccttccca cagcacccaa 120
 gcagaccaca gcaacggctg caaccctgc tggaacgccg tggtagactt ccccatccccg 180
 gctgccgctg acaccgcgg cctcgcactc cacgtgaggc tccgcgcccc gcgtctatac 240
 ctggggcgatc gcgacatcgg cgagggtgtt gtgcccacgc acgacctcct ggccggcgcc 300
 gacaaggggtg gcgatccgag gcccgtagc taccaagtgc gcaggccgca ctctggccgc 360
 gccacggcg tctctactt ctgctataag ttcaccgatg ttcccgcggt ctcttggtgc 420
 t 421

<210> 3787
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-H5

<400> 3787
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 gtcgtcgtcc atggctgccg tcggggccgc cgccccggg gaaaccccca agttcatctc 120
 ggcgagcgcc cttgagtgt cgcctaact aacggaaata gcaaaggcg gcaagctgat 180
 cgatgtccat ggccacgggc tgtgcccgt gcggttcgac cacacgcgcg ggatcagcgc 240

ggtggccagc agctgcaagg accgcccgt ggcgtcgccg gagcgctgct gcggggcgct 300
caaggcctac gcgtgcccct acagcgagct catcaacgac aacgccaaca acggctgcgc 360
cagcgagatg ttctacgtca tcatgacacg cggcaggctg cggccggggc tcttctcgca 420
gctgtgcg 428

<210> 3788
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-H7

<400> 3788

ccaccgtccg aagacggaca gtggcgctta catggagcac cgtctggccg gcgtggacag 60
ggtgcagatc acgggcctga acgcgggcac gctggacctg acgaataacg gctggggcca 120
catcgtcggc ctcgtcggcg agaggaagca gatctacacc gacaagggca tgggcagcgt 180
cacctggaag ccggccatga acgacatgcc gctcacctgg tacaagaggc acttccacat 240
gccgtcggga gaggaccggt tegtgtgga catgagcacg atgggcaagg gcatgatgtt 300
cgtcaacggc caatgcatcg gccgtactg gatctcctac aagcacgcc tccggccggc 360
atcgagcag ctttaccacg tgccccggtc cttcctgcgg cagaaggaca acatgctggt 420
gctgtt 426

<210> 3789
<211> 403
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-044-Q1-E1-H9

<400> 3789

ccacgcatcc gaccaagggt ttgagaaacg atttagtgct ctgcacatat ccaatatgat 60
acttgctatt gggagtatga ttttccatgc caccttgcaa cttctcctac aacagagtga 120
tgagactcct atggtttggg agatccttct ctacatgtat gtcctctatt caccggactg 180
gcactacagg agcacaatgc caactttcct gttcctgtat ggtgctgcct ttgccgtagt 240
acatttcttt gcccggttcc aagtcgtatt caagctgcat tacgttggcc tctgcttgct 300

ctgcatcccc cggatgtaca agtactacat acagacgaaa gacgtgggtg cgaagcggct 360
cgcaaaaactg tgggtcctta cactgaccct tgggaacctc tgc 403

<210> 3790
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-B1

<400> 3790

gggccgaccc acgcgtccat gcgtggacag cctcaccgca aagccagaga gccagaaggc 60
gaccccgcg cggctggcgg agctgttcgt gaacatcgcg gccgagaagg gatccgggat 120
ggccacgttc gtgcacggga agtacaacaa cgccaaggac agcaccgtgt tcaagtgcta 180
cgacagctgc tcggacgacg tcgaggaggc cgtcgccac ctcaacggcc tcgtccggga 240
gccacccgac gccaaagtcc tggagctcaa gtcgtggctc tcctccacgc tcggcggcac 300
ctccacctgc gaggacgctt gcaaggacct gcccaagaac ggcgacaagg acgacgtcgt 360
caacttcagc ctcgacttcg agaagctgca gcgcgtcacg ctggacctca tc 412

<210> 3791
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-B3

<400> 3791

caatcctcta aagtgagtcg tattagctgc cttgttctt ggtgaaatgg attgtactgg 60
gccacattta cacactgttt atccacaccg gtccactgat actcatcctt ttgccaccat 120
gggctctggt tctcttgctg caatgtcagt gtttgaatct aagtacacag aaggccttac 180
tacggaagat ggaatacaga ttgtgtgcc aagcaatctgt gctggatatt tcaatgactt 240
gggtattggg agcaacgtgg tcgtctgcgt gataaccaat gggaagacag aatacttgat 300
aaaccaccat ttgcctaata ccaagactta tgctagtcca aatggataca ttttcacaaa 360
tgggcagact gaagtactgt cttcaaaggc cacacttcta aagc 404

<210> 3792
 <211> 215
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-C3

 <400> 3792

 caataactcta tagtgagtcg tattaagtgt cagggttacga gcaacaacgc agtgatgagg 60
 tcatccagca gcaatgtcca gcatcgggca gtccttctac gctggcgacg ccgaggcgga 120
 gggcgagtac cacgtggagc acgcggtgga gtgcgtcaac gacaccgccg gagccgcgga 180
 cgacatctcg caggtgtagc agcaccgcgc cacca 215

<210> 3793
 <211> 431
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-C5

 <400> 3793

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 gcgagggcgc ggcgagccgg cgggcgcaat cggatttggg gaggcaaaag gaaaattccg 120
 gagagcagtt cctttccgcc tccccatttc ctccggatag atttgggttt ggcctgcgtc 180
 gattagtcgc gcgctcgaa cgcaccaat ccattcgccg agggatcgag caagcgaggc 240
 gtggatcgca ggcggtattc cctgcctgcc tcttcttctc ctccgcctgt tcttgccgcg 300
 gtctccccct ccggccgacg tggactcgac agatcattaa tttttgttg gcatacattc 360
 ccaaccttga tgtaaagacc tccttcattc ataaccctgt gttttggaag ggtatttcac 420
 aatgaagccc a 431

<210> 3794
 <211> 455
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-045-Q1-E1-C6

 <400> 3794

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 gggccggcca tggggttccc gtcggtgtgc tactgcgtga tcttgccgca gccgtcacc 120
 ctggtgctgc agctgctgga cttcctgcgg caccgcgtgc tgctctgcct ctctcgtctg 180
 ggctcgcgg cgccgccggc cgccgacgac catccggcct acgcctacgc ggccgccggc 240
 ccgccgccgt cggacctctg ggcaactgcag ccgtcgtccc tgcagcagca gcagcagcag 300
 gcggcgccgg cgcccttggc gggcgggccc acgcgggcag ccatcaaggc gcgcctgccc 360
 gccgtccggt acgccgacct gctcggggcn cgccgcgccc cgccggggccc cgccgtctgc 420
 gccgtgtgcc tcggcgcgct ccaggcgagg caccg 455

<210> 3795

<211> 324

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-C7

<400> 3795

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 gatgcttgcc tctattcttg gcgatgacga ttgtcaatgt gtacatcttc aaacctttgt 120
 aaggtgagca tcatactgtt cttttggaca tgcattgtgt gaaagcatat atatattttt 180
 tgttcatttc gaagctggct ggcccttggt tacagtctga aggagttcta cttcggggaa 240
 tctggatctt gcagagggtta ccttctctca ggcttagggg tttgatttgg gcattgatgc 300
 tgtgtgcaca ttggtgagag agga 324

<210> 3796

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-F5

<400> 3796

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 gtcctcccaa ctagggcgcg cgcgcgacct cggcaccggc ggccctcgat catcggtctc 120
 tcggatcccc gccagtgcac gccctggaac ggaaggacgg aatggcagcg tcgccggacc 180

acctcttcgg cctgcgcaac agcttctacg tcggcgcata ccacgccgtc atcaccagca 240
gccagtcctt ccccgcgcaac gcgctctccc ccgacgacct cgtcgagcgc gacgccctca 300
tgtaccgctc ctacatcgcc atcggtcctt accagctggt gatcggcgag atcggggccca 360
gcgc 364

<210> 3797
<211> 148
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-051-Q1-E1-F6

<400> 3797

taccggctga caattcccgg gntcgaaaca cgcgtccacc cacgcgtccg aagaagtcgg 60
ctaagtcttt cgatcgtgtt gcgcggtctt ttcgtcgcgt gggccatctg taggtgtagt 120
ctgaggcctg acaggagcat ttgagtgg 148

<210> 3798
<211> 159
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-F7

<400> 3798

ccacgcgtcc gaacacataa ggatgttctt tcattcttct tttttgttcc cttgttgcgt 60
caaattgtgc cttaaccacg tcgatgtgct gccaaattgt caatccctga tacggtcaat 120
catggatgga ccgactgcaa tataaatata ttataccac 159

<210> 3799
<211> 419
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-051-Q1-E1-F9

<400> 3799

ccacgcgtcc gatcgatcac aacaagatgg catgtataga caatgcaatg agagccttgt 60

tccttctagc gctcttctgc accgtgcatg gtgagaaggc aaagtcaaag gacaacgatt	120
caaaagcgtc cgggcccggg gggctcttcg acatcaccaa gttgggcgcc tctggcaatg	180
gcaagacgga tagcacgaag gctgtgcang aggcgtgggc atcggcgtgc ggcggcaccg	240
ggaagcagac gatcctcatc cccaagggcg acttcctcgt cggaccactc aacttcacag	300
gcccattgcaa gggcgacgtg accatccagg tgaatggcaa tctgctggcg accacggacc	360
taagccagta caaggatcat ggtaattgga tcgagattct acgcgtggac aaccttgtc	419

<210> 3800
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-G10

<400> 3800

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gaatgagaac gggcaatgga ttacctgcgt tgaggcacc ccaatagtagat ggaagtatag	120
agaacgactc ggcattggga gatttcgctg agcactcgcc attcgggagc agcaattcgc	180
tgccagagtt gggaccagat ggcacacaag atctagcctt ctaccaaaga agcagccctg	240
aacagcaatg gagctggtcc gggctctgtt caacagagga ttccgatgac ttcgaggttg	300
caacgaattg ctgctcagat ctggattgctg tgagaccatc tagtgcccca aaagcttctg	360
gtttaacaaa cggagggggc tcagctgcaa gaaagtccca actgaagggt gcaaaaagtt	420
cagaca	426

<210> 3801
 <211> 434
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-051-Q1-E1-G11

<400> 3801

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ttgtgttctt cgccgtggcc tcaccggctg ctctggccgc cttcgatgtg atagagatgc	120
tggccgacaa gcccacgtac tccacgttcc tgaagctcct gcaggacacc aaggtcgcgg	180

gcgaggcgaa tcagctccgg tcggcgacgc tactggctgt ccccgacaaa cttgccaagc 240
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gttacttcga ccccatcaag ctggacgaga tgaagacacg caccgccatc ctccccacgc 360
tgctctccgt cancgacaag anactcggcg tcttcaacta caccagggcc gacgacgggc 420
aatgtactt cggc 434

<210> 3802
<211> 456
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-G12

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taccggcata aagaaggacc ttcaattcaa ggaaaaccgc caacggtttg gctttgcaga 120
gtcacggttg acctatggca tgataggtgg aaggtttgtg aaggagaga acccatttgt 180
cgaggagtcg tatcaaaggg ttgctctcga ccagctcatt aagattgcgg gcatcacgga 240
tgacgacctg ctgatcatgt ctgatgttga tgagatccca agtggacaca ccatcgacct 300
cttgagatgg tgcgatgacg ttccggagat actccatctc cagctcagga actacctcta 360
ctcgttccaa ttcctacttg acgacaagag ctggaaggct tcagtgcaca gatacagagc 420
tggaagacg aggtatgcaa cattccggca gacgga 456

<210> 3803
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-G2

<400> 3803
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tttgagcttg gcattcctcc tgaaaacatc actgcaaacc aattgttatt tggcacattg 120
ggggagtacg ccggatttga tcccacagag cccacttcac gcagtggggg taaagcaaaa 180
gcagtgcagc aaataaaaca ggaccatggc tacaagacag ttgttatgat tggatgatggc 240

gcaactgatc tggaggctcg gcaacctggc ggagcagact tgttcactctg ttacgccggg 300
gttcagatga gagagccagt cgcagcacia gctgactggg tgggtttttga ttttcaagag 360
ctgatcacta agttgccatg aattcattac ctaccgcaat ttatgaacct ttgcattgt 419

<210> 3804
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-G4

<400> 3804

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cgccgcctcc tcgcgcagct atcctccgcg ggcctcttcg aacgcgtcag cccacacccc 120
aagggtccagc tcgtcctgat ggccgtcctc ttctacgccg cgctgtacct cgtcctcgca 180
tgccgacagc cctggggcgca cctcctcgcg ggggggtctca ttggcttcgt ctggatccag 240
tccgggtgga tggggccacga ctggggccac caccgcatca ccggccatcc ggtcctcgac 300
cgcgtcgtgc aggtgctctc cgggaaactgc ctacacggcc tcagcatcgc ctggtggaag 360
tgtaaccaca acacgcacca catcgcttgc aacagcctgg accatgaccc ggacctccag 420
cacatgccgc tctttgccgt ctcccc 446

<210> 3805
<211> 339
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-G5

<400> 3805

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caagcgacat ggccagcaaa agcttgattt tcaccatttg tagctctgta aattattcag 180
atggagtgta tccaaatgtg catgtggtcc aactgcattt tcatgttcct tttatgtggc 240
gtcctttttg gcaaaacacg aaatgcggcg cgcgtaacgc caacgattgt aaaattgcc 300
atcctaatac cggagtactc caagtgtgtt ggagaacct 339

<210> 3806
 <211> 345
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-051-Q1-E1-G6

 <400> 3806

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 aaggtgccgc ccggtcccaa catcaccacc aactacaacg gcaagtggct caccgccagg 180
 gccacctggt aaggtcagcc caacggtgcc ggggctcctg acatcgggtg tgcgtgcggg 240
 atcaagagcg tgaacctgcc accctagagc gccatgacgg cgtgcgggaa cgtctccatc 300
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<210> 3807
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-051-Q1-E1-G7

 <400> 3807

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 ccggcgacga ccttcgccgt catcttatcc gtcctcttct gtgccgcggc tggcaccgcc 180
 gtcgacaacg acctccccga ctacgtcatc cagggccgcg tctattgcga cacctgccgc 240
 gccgggttcg tgaccaatgt caccgagtac atcgcggggc ccaaggtgag gctggagtgc 300
 aagcacttcg gcaccggcaa gctcgagcgc tccatcgacg gggttgacga cgggaacggc 360
 acgtacacga tcgagctcan ggacagccac gaggaggaca tctg 404

<210> 3808
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-G8

<400> 3808

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atggttctcc cttccaaaaa gcaaaacaaa agaaactcgt atagtcgatc gacgaccatg 120
catcacattt ccttttcctc gatcttctct tatttccgca gaaaaacaac gaaggaaacc 180
caaccaagga aacgcatgct attgcttaag catcgccgga ggagctggtc gatcgctcgc 240
tcactcacgg gcctgattgt tccggtcacc tgctgctcgtc gtcgagctga gacacgctcc 300
tccagaagcc cgtgccgtag aacctggccc acacctcctt ctcaagctcc cccgtctcct 360
ccagctgcaa ggcgggcttc accggcagc 389

<210> 3809

<211> 467

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-051-Q1-E1-G9

<400> 3809

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gccttcacgc ctccctcacc aaataaggct ccgccctttt ccgacattca cagggggggac 120
aggaaatcag cggccatggc ctcgattccg gcgacgacct tcgccgtcat cttatccgctc 180
ctcttctgtg ccgcggctgg caccgccgtc gacaacgacc tccccgacta cgatcatccag 240
ggccgcgtct attgcgacac ctgccgcgcc gggttcgtga ccaatgtcac cgagtacatc 300
gcggggcgcca aggtgaggct ggagtgaag cacttcggca ccggcaagct cgagcgctcc 360
atcgacgggg tgaccgacgg gaacggcacg tacacgatcg agctcangga cagccacgag 420
gaggacatct gcgaggtggt cttggtggaa agcccgcgca aagactg 467

<210> 3810

<211> 402

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-051-Q1-E1-H10

<400> 3810

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ctctcctagc gtcgatgctg ctcgtcgggc tcgccgcggg ctccgaggan gangangacg 120

gcggcgga aaagaagccc cacgtcaacc acggcaagtt taaggcggag ccbtggacgg 180

acgggcacgc gacgtactac ggcggggcgcg acgggttaac tgacaccacg gacagcggcg 240

cgtgcggcta caagggcgag ctggggaaag actacggcac cctgacggcg gccgtgggcc 300

cgtcgctgta caccaacggc accgggtgcg gcgcgtgcta cgagctcaag ggccccaagg 360

gcaccgtggt ggtgacggcc accaacgagg ccccgccgcc gg 402

<210> 3811

<211> 231

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H11

<400> 3811

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ggatgactgg gaacatcact gcaccagtta gcacatcgtc atgtgagctg ggcaccaatc 120

catatgatgg gggttgtgtc ctaccaggac agtatgagta ttaccactgt attggagtag 180

ttcgcagttg gggatacact catgtccaca cacagcacag catcatgtgc c 231

<210> 3812

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H12

<400> 3812

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acatgttgaa gtagtaatag ttactgcagt actgcatctg atttgacttg ttgtatggta 120

aattgcccgt ccacgcaggt tctatacttt gaagattttg taccttgtca gatatcacag 180

tcctcttttg atgtgttgat gagcacagac cggcaaagct atggtttcaa gttaaaaaaga 240

ggtttgctgg atgatgaagg aaatgctttt cttgagtggg atagtatgac atttgctcgt 300

attgaagggtg gattttctgt cgatccttga ttttctctag ccaatgctat gcaagaacag 360
cagggatctc aacaagaaag ataccttgtg aggaaggcac tcaagtctgc tctatctca 419

<210> 3813
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H2

<400> 3813

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cattggaata tgagaccata gtgagtgaac aagaagagaa ttactggtgt cttttactcg 120
ttgttggtac cgatctagac accaatctag ccagggtgtac cgtcatcggt gctttctgct 180
caggcgtgga tagtccgcga cctgtgacag gagcgggacg ttgtctacgc cgaagccgga 240
cgggccacgg gtgcgcagag gcggtggcgt tcgccaacag cacctggatc taacctcccg 300
aaagggaccc catcacgaag aagagatcat aggggtttatc ttgggattaa cataccaccc 360
aagacacctt tagacgacgt gaagccgaag agagggtgaaa ataaagatga g 411

<210> 3814
<211> 343
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H5

<400> 3814

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agaaggagag agagaaacag gggagcgccc cccactcct ctctcgctgcc aagaaaccac 120
cattcctaac ggattttctac ccagtcttct ttaggatttc cgattcggtt ctccggtgag 180
agggtgggaa ttttattttc ctccgctgca accggtgcaa acatttcgaa tccctccatt 240
gcattcctct ccgtgcaatc ggccattcat atgttccttg gctgcattga ggcacggta 300
cgcgaatttt gatgtgagct gaccagacat ggctgcgaaa gac 343

<210> 3815
<211> 402
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H6

<400> 3815

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ccccggccga cacacgcgtc caccgattca gtcctcgtt tttctctct cctctcttcg 60
tccccgcgtg gataaggata gatagtcaca ggggagcgt ccaccactcc tcttcgctgc 120
gaggaaacca tcattcctaa cggatttcta ccagtccttc tttaggattt ccgattcggg 180
tctccggtga gagggtgga atttgatttt cctccgctgc aaccggtgca cacatttcga 240
atcgctccat tgcattcctc tccgtgcaat cgggcattca tatgttcctt ggctgcattg 300
aggcatcggg acgcgaattt tgatgtgagc tgaccagaca tggctgcaaa agacggctcg 360
ggatcacagg atctgggggg gcacacgttc tggcccatgc tg 402

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<210> 3816

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-051-Q1-E1-H9

<400> 3816

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cgccgtgtgc accgacacca taactgggcg caacttcgtg atcgccattg ttgagttcgg 120
tggttcattg ctccagatcg acatcgtgaa cctgttgtac atctgagagt gcaacagcgt 180
gcccgatgtg gccaaactact gtaagcagg gatcaagatc acagattaca atcagaacca 240
gttcgtgaaa ctgctcgtgg cctctatgtt cagcaccgtc gacggtatga gcatcgcggg 300
ccatggcttc gccttcacga aagacaccgg tcacagtagg gtgaccccg ccattgacgt 360
ctgtaacggc ctgctgggcg agaacgacca gatcagcatc tacga 405

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<210> 3817

<211> 433

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-052-Q1-E1-A1

<400> 3817

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ctagtcgggg ggcgcggggg aagagatatg gatcggtcgt atctccccgt ggcggcggcg 120
gccgtcgcgc tggctctcgt gtgctgctcc ggcctctgcc gcggcgagcg gctcggggcg 180
agggagtgcg aggacctggg gttcaccggc ctgctctct gctccgactg caacgcgctc 240
tccgagttcg tcaaggacca agagctggtg gaggattgcc ataaatgttg caccgaggat 300
tcagatgatt ctatcagcaa gctcacattt tctggtgcaa ttattgaggt gtgcatgang 360
aaactggtat tttatccaga agttgttggc ttctcgaag aagataaaga cgacttccca 420
tatgtgggaa ccc 433

<210> 3818
<211> 237
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-052-Q1-E1-A10
<400> 3818

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caatgagacg ctttgcttca aaagtacgtc gtgataacca caaagagctt gattttaatc 120
gtcggtaatg ttcaaaggat cgcaaacgct catcggatgg atcaacacga gtgcgcaatc 180
agacatcgat tgaaccattg tcattgcagc tttcatagct tctgctgtg cgccatg 237

<210> 3819
<211> 402
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-052-Q1-E1-A12
<400> 3819

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caacgaaaat gtcgcgcgcc acagctgcgg tctcttcta catcctcgcc gtcgctgccc 120
tcagcgcggc cgaggcaccg gcagagtcac cgaaggcagg cagtcctgcc aagggaacgg 180
ccgagtcacc gaaggcaggc agtctgcag ctctgcca ggaccccgag tctgctgcca 240
cgagaactgc ccccgctaag gcacctcaag ccgcctccac ccccgccgct gccgctgccc 300

catcgtcgtc gtcgtctagg aagtctgggc cagctgccgc gccgaccacc gccgcctcta 360
caccgtcttc ttccacggac gaagagttga gcccttcgcc gt 402

<210> 3820
<211> 341
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-A3

<400> 3820

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tcgggctcgc caagctgggc cccatgggag accagagcca cgtcaccacc aaagtcattg 120
gcaactaccg ctactgcgcc cccgaatacg ccatgaccgg caagctcacc aagatgtccg 180
acatctacaa cttcggcgct ctgctgctcc aactcaacaa cggccgccgc gccatcgaca 240
ttggcaggcc gtccgaggag caggctctac ttaactgggc ttgcctctg ctgagagaca 300
agaggatgtt cgtgaaactg gccgaccgt ttctgggcaa c 341

<210> 3821
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-A5

<400> 3821

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gacagctata tgctccatct gatcctacca agcaaagttg atccattggt caatctcatg 180
aaagttgaga aggttcggga ttctacctat gatatgattg gaggccttga ccagcaaatt 240
aaagagatca aagaggatcat tgagcttcca atcaaaccatc cggaactgtt tgagagcctt 300
ggaattgcgc aaccaaaggg tgccttctt tatggacctc cgggcacagg aaagacattg 360

<210> 3822
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-A6

<400> 3822

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tcccccaaat ccagccgtcg gcacctccgc ttcaagatgc agatctttgt gaaaaccctg 120
actggcaaga ctatcacctt cgaggtggag tcgtctgaca ccattgacaa cgtaaggcc 180
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cttgctgctc gcctcagggg aggcattgcag atcttcgtga agaccctgac cggcaagact 360
atcacctcgc aggtggagtc ctccgaacac attggaaacg tccaaggcaa agatcaagga 420
caaggagggc at 432
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<210> 3823

<211> 427

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-052-Q1-E1-A7

<400> 3823

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gagccgcagc atggcatcat cggccgcgct cttggtgcta gccctcgcg tagtgccggc 120
caccgcccc aaggtagcgg aggcaaagaa gaagagagcg gcggagagcg gcgagggcggc 180
ggaggcgaag aagatccagg acgacttctg ctgcagctg tgcgagggca agaaggggac 240
ggacctggtc gtgtgcaagg agtctcgcg gctctcccag cagtccaacc tggctgctgta 300
cggcaggatc cagtgcaagg gcaagtgcac cgagcagaag ggcatcacgg cgccggccat 360
gaaggtctgc caggaggagt gcgacaaggc gtacgtggtg aaggcggccg anggtcacia 420
ggcctgc 427
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<210> 3824

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-A8

<400> 3824

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gaagtaaaca tgtctgaccg ggcaaagatg tcgtggcagg cgtacgtgga cgagcacctg 120
atgtgcgaga tcgagggcca ccacctcgcg gcggcgcca tcgtcgcca cgacggtgcc 180
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tacatggtca tccaaggcga gcctggtgcc gtcatccgtg gcaagaaggg atcaggaggc 360
atcacctga agaag 375

<210> 3825

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-A9

<400> 3825

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agccagaccg ctggcgtaag cgtaaggaga gatggatcga cgaggcacat ccagggatca 180
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tccgagcccg ccgctgccga cgagagccag aggacgacac tggcggagcc ggtagtgaac 300
cagctggcca gggagttcca cacggggacg gaggcgttcg agcacaacgc gcccgccgtg 360
gccgaggcca acaggctgcc g 381

<210> 3826

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-B1

<400> 3826

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acgtactacg gcgggcgcgga cgggttaact gacaccacgg acggcggcgc gtgcggctac 240
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accaacggca ccgggtgcgg cgctgtctat gagtcaagg gcccgaagg caccgtggtg 360
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ctcaccatac cg 432

<210> 3827
<211> 407
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-B11
<400> 3827

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caaccccccc ttgggtccg gaaaacaaaa ccaattccca atggaaataa aaaagggtccc 180
ctgccccgtc ctgcggcgg cggcctcggc caccgtggtc ccccgccgcc gagggccggc 240
gcccggccca acagcgctc ctgcggcgg ttccggcctg cggcgtgct ggccctcctg 300
gctctccttc ttgcctact acctgcagta aaattaaagg aaggtcngac ggagatgctg 360
ctggctgcca ttgcctgtat tcggttgat tccgtttata tatatat 407

<210> 3828
<211> 435
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-052-Q1-E1-B2
<400> 3828

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ccctcctcgc cgcggatccc ccactactcc ggtagaaaat ggctgacgct gaggatatcc 120
agcccctcgt ctgcgacaac ggaactggca tggtaaggc tgggttcgcc ggcgacgacg 180

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 ctgaggcgcc cctga 435

<210> 3829
 <211> 461
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-B3

<400> 3829

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 gccacgtcgc cgcagcatgc cgttcttggc gccaggctgg cgaggagcca gtcgtcgctg 120
 gcttgctgga acgccgccgg tctcggccgg cggcgccggc gggagcacac gatcaggcgc 180
 gctctcagcg cgagcatcga cagcgtcggg agcgacggcg gggacgacga ggagtctcgc 240
 aggaggatcc aggagctcgc ggtgggtcag caccggggcg ccggcggtg cnggtggccg 300
 gcgagcgtgg agcggagcgc gagcagcgtc gggctgccgc tgtcnctgcg gatgctcaaa 360
 cggaggaagc agcagcagct ggagcatggg cgggtgggacg agcggctggt cgacagcgcc 420
 ggcgagtctg cgcgcgccgc ggtggggcgc gccttctcct c 461

<210> 3830
 <211> 460
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-B4

<400> 3830

ggtccagaat acacgggtcg acccacgcgt ccgcgacggg gccaaggccg acatctggtc 60
 ctgcggcgtc atcctcttcg tgctcctcgc cggctacctc ccgttccacg acgccaacct 120
 ggtggagatg taccgcaaga tcagcagagc cgacgtcaag taccgcagt ggttctcccc 180

tgagctccgg cggttgatgc ccaagctcct cgaaccgaac ccaaacaaca ggatcacgat 240
 cgagaagctg gtcgagcacc cctgggttcaa gaaggggtac aggccggccg tcatgctggc 300
 acagccgcac ggctccagca gcctcaagga tgtccaggtc gccttcagca acgccgacca 360
 caaggacagc agcaccaagg tggaacagcc ggcggacagc tccttgaagc cggcgagcct 420
 gaacgcgttc gacatcatct cccactccag aggggttcga 460

<210> 3831
 <211> 437
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-B6

<400> 3831

ccacgcgtcc ggcgggaaat gccggcgggc gcggccatga cgacgaggcg ggtggtgctg 60
 gaggtgctac ggtcggcctc ccgcgacgcc ttccaggtgg ccttctcctt cgcggcgagg 120
 ccgcccgtgt ccaccatgct caagccggcc atcaccaagc ccctctacca ccaccaccac 180
 gacaacgact aatctggcgc agatctacag cacggccgtc ggcatgcctt cacagcccgg 240
 tgggtgtgac gactattgat gacgtactac cacatttcgt cgctcctatt ctagtaagca 300
 acgcanaaga aaatgttgta agattgagcc tgagagcttg agtcaccaat gtaaattgta 360
 tacgactgac tatatataga gcatgctctg taaccatata tattgcccgg gcccccttg 420
 ccctcgcaat ctatgct 437

<210> 3832
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-B7

<400> 3832

ccacgcgtcc gcccacgcgt ccggtcctct cctctgtccc tctacggtgc ttctgctcgc 60
 cggcccaaaa tcgcctcctc gaccacgcc ccttcaggc tcccgctctc atgggtctcc 120
 tctcaaacag gattgggagg gagagcctca aggcggggga tcatatctac tcctggaggg 180
 cggcgtgggt ctacgcgcat cacggaatat atgtgggcga tgataaggtg atccatttca 240

caagaggaag aggacaggag gtcggaacag gaactgtcgt cgatattatt cttgtgagtt 300
ccaccccaaa acgaagcaac acgccttgcc cgggtgtgcac cgacgaaacc agcgacagca 360
gcacagagac gaacggcgtg gtatcctcct gtctcagctg cttcctagct ggggggtgctc 420
tctac 425

<210> 3833
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-B8

<400> 3833

ccacgcgtcc gcccacgcgt ccgcctgaaa ccagcgtgct gtgccgcccg ggacgatggc 60
gccgcgccag ccgctgtctc ccagtttctt ctacgcggcg tcgtccggcg tcaacggcag 120
cagggaggcg cctccggtgg tggcggggcg cccgagcgag ccgctcggca agatcgagat 180
gttctcgccc gcatactacg cagcggggcg cttgggaggc gccgcggcct gcgggttcac 240
gcacgccgcc gtcacgccgc tcgacgtcat caagtgaat atccagatcg accccgccaa 300
gtacaagaac acctcgtcgg cgttcagcgt ggtgatgagg gaagcaggcc tccggggcgt 360
ctacaggggg tgggc 375

<210> 3834
<211> 449
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-C1

<400> 3834

ccggtcaaga attatcgggt cgaccacgc gtccgcccac acgtccgatc aagccagaca 60
acttccttat aggcttaggt cggaaagcta atcaggctta tatcattgat tatgggcttg 120
ctaagaaata caaggacctt cagactcata aacacatccc atacagggag aacaaaaatc 180
tgactggaac agcacgttat gctagtgtga atactcatct tggaatagaa caaagcagga 240
gagatgatct ggagtctgtt ggctatcttc tgctatattt tttaagagga agcctcccat 300
ggcagggcct taaagctggc actaagaaac aaaagtatga taaaattagt gaaaagaaaa 360

tgcttacctc ggcagagatt ctgtgcaaatt cttacccgcc ggagttcgtc tcatatttcc 420
actattgtcg ctccctgcga tttgaagac 449

<210> 3835
<211> 446
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-C10

<400> 3835

cggctctagaa ttcaccgggt cgacccacgc gtccaccac gcgtccggca gccgtggccg 60
ctctgctggt gttcgccgcg gtgtcgctg ccgcgcgcgc ggtggcggcg gaggcggagg 120
cgaaggcgaa ggctgtggga ggcgcgccgt cgggtgccgc tggctcgctg gacatcgcg 180
agctgggcgc caagggcgac ggcaagtcgg acagcaccac gatggtgctc aaggcgtgga 240
agcacgcgtg cgaggcgacg gggcagcaga agatcgatc cccaagggc aactacctga 300
cgggcgcgct ggacctggtg ggcacctgca agtcctccat catcatccgc ctcgacggca 360
acctgctcgg cancgcgac ctcaacgcgt acaagaggaa ctggatcgag attcagaacg 420
tcgacaacct gtccatcaac ggccac 446

<210> 3836
<211> 100
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-C11

<400> 3836

gacgcacgcg tccaaaataa atcatattaa aatnaacaa tcagaaaaaa aaaaaaagg 60
gggggcgccc caaaaggatt caagcctacg ttagccttga 100

<210> 3837
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-C2

<400> 3837

ccacgcgtcc gcggtgctgc cggacacggc gttccaccag gtgttcatca ccccgggcgg 60

cgtgatccac ctccgcgacg gcgccaactc gcagtacgtg accagcacgg cgttcctgct 120

ggtggtgtac gcggacctgc tgctgctggac ggggcagacg gtgctgtgcg ggaaccagcc 180

gctgcccccg gcccggttgc acgagttcgc gcggcagcag atggactacc tgctgggcgc 240

caaccgcggg cacagctcct acgtcgtggg cttcggcgcc aaccgcca cgcagccgca 300

ccaccgcggc gcattccccc ccgtgctgcc ccccggcacg gacgtcaact gcggcctcag 360

cttcggggac tggatggcgc ccgacaagcc caacccaac gagctcaccg gcgccatcgt 420

cggcggggccc gacaagaa 438

<210> 3838

<211> 459

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-C3

<400> 3838

ccggtcaaga attatcgggt cgaccacgc gtccgctacc ctctcgtcgc tcgcactcaa 60

cccgccttca cgctccctc accaaataat gtcccgccct tttccgacat tcacaggggg 120

gacaggaaat cagcggccat ggctcgtatt ccggcgacga cttcgcctgt catcttattc 180

gtcctcttct gtgccggggc tggcaccgcc gtcgacaacg acctccccga ctacgtcatc 240

cagggccgcg tctattgcga cacctgccgc gccgggttcg tgaccaatgt caccgagtac 300

atcgcgggcg ccaaggtgag gctggagtgc aagcacttcg gcaccggcaa gctcgagcgc 360

tccatcgacg gggtgaccga cgggaacggc acgtacacga tcgagctcaa ggacagccac 420

gacgaggaca tctgccacgt ggtcttggtg gacagcccg 459

<210> 3839

<211> 355

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-052-Q1-E1-C4

<400> 3839

cggtccagaa taccgggtcg acccacgcgt ccgggcgagg gccacggctt cgccgtcgac 60
tggtgggccc tcggcgtgct cgcctacgag atggcggttcg ggccgacgcc gttcaagggc 120
cagaaccgca aggagacgtt ccggaacgtg ctgcagcagg agctcgagtt cccggggggac 180
acccggtggc ggacgccgga gctcgcggat ctcatctcgg gcctgctgga gcgggacccg 240
aggaggangc tcgggtacgc cggccgcgcc gacgaggtcc gggcccaccc gttcttcgcc 300
ggcgtcgcgt gggacatgcc cacggaggtg tccaggcccc cctacaaccc gccgc 355

<210> 3840

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-C5

<400> 3840

ccacgcgtcc gctttcgagt gcgtgcgtgt ctgttcaagc tctgatcgtc tctccggccc 60
attcgccgga ggaaactgac cgccgccttc tcgctctcgc tctctaccct attcccgggg 120
ctgagagggg aggagagaag gccacgtcca caccataaag caggacgtac agacacgtgt 180
acgaggggga tcacggtcgg gtgaggtgac taagctggcg gacggaacga cgacgatggc 240
gaggagcggc ggccgggatgg aaggcagcgg cgggctgaag aaggggccgt ggacgcaggc 300
ggaggacaag ctgctgaggg accacgtgcg gcggcacggc gagggcaact ggaacgccgt 360
gcgccgggag acgaggctgc agcgtctcgg caagagctgc cgtctccggt gggccaacca 420
cctccgcccc aacctc 436

<210> 3841

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-C6

<400> 3841

ccacgcgtcc gcccacgcgt ccgggagAAC cagcagcctc caataagagc cagccagaga 60
aactaataaa actctcaccg ccgccatccg agagaacaag ccaaccgacc ccgtccccaa 120

ggcaatccgt cgccgacgta ccaccgccac cgcaggagcg agatggagat gaagaggatc 180
ctcttcgccg tctctgctgt catcgccgcc tcggccaccg cagtgtggc ctccaccgag 240
gccgccgccg cggggcgcgc aactgcctcc gagtcgtccg ccgaggctcc cgctggcgct 300
ggcgctggcg ctgccgtgg cgccgccgcc gcggggccct ccgccagcag cggcgcgccc 360
gccctcgccg ccgcgcccgc cgcgtctctc ttctccctcc tcgcctacta cctccactaa 420
gcgtgtgcgt g 431

<210> 3842
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-C7

<400> 3842
ccacgcgtcc gaaagaagtc gctaattct ttcgatcgaa ttaggcgcct tcttcgtccc 60
acgtccgtc tttatttgta atgtgaagct tacaggaaca tttgagtgga tcatggacgg 120
attggtaggc ctcttgaaag tccgggtggt gaggggcatc aaccttgct accgcgacgc 180
aagaggcagc gatccgtatg tcgtctacg acttggaag aagaaactta agacgagcgt 240
gaagaagaga tctgtgaacc ccactctggca cgaggagcta actctgaccg tcacagatcc 300
cagcctagct ctgaagctgg aggtgttcga caaggacacg ttcagcaggg acgacccgat 360
gggggacgcg gagatcgacg tggcgccgct ggtggaggc 399

<210> 3843
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-C8

<400> 3843
gccgccaggt accggtcctg aattccggtt cgaccacgc gtccaggaaa acttgaaatc 60
agcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaataaaaaa 120
taaaagaaaa aagaaaaata taaatataaa aaaaaaaga aaaaaaatca tttaaaatag 180
ttaaaagagg tgaaggagat ggatttttaa gtaaagggat cgaattggaa gtctgataaa 240

aaagtcttca gcgttggcta cattggtgtg ttagcggatg ggggtgtgctt ggattttctg 300
 gggggggggg cttcgtaggt ttcattgtttt tttgcgggtg tgggggttatt gtggggggtg 360
 ccgtgggggg ttttgcggtc aagccgtggg gg 392

<210> 3844
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D1

<400> 3844

gggtcgagcc acgcgtccgt gcagctgtg gccgccggcg tggccgtgct actgctagtg 60
 gcaccgccgg ccttgggtga cgacgacatt gtagaagtcg gcgtcaactg gggttcgcag 120
 ctctcgcacc cgcttctccc cggtcctgtg gtgaagatgc tcaaggcgaa ccgcatcgcc 180
 agggtaaga tggtcgacgc cgactcctgg cccgtcggcg cgctcgtcga ctccggcatt 240
 gaggtcatgc tcggcatccc caacgacatg ctggagacca tgagcagcag ctacggcaac 300
 gccaggatt gggtaagga gaacgtcacc gcctacggtg acaagcttaa gctcaagtat 360
 gtggcagtgg ggaacgagcc atttctcaaa gcatacaacg ggtcattcat gaaagacaac 420
 cttcccggcg ctcaagaaca 440

<210> 3845
 <211> 438
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-D10

<400> 3845

cacgcgtccg atcaaagcgt acgaggacgc cgctcctgtg ctcaccgtct ccaagatcca 60
 ctacgagaat atcaagatgg aggactcagc caaccccatc ttcattcgaca tgaagtactg 120
 ccccaacaag ttgtgtaccg ccaacggcgc ctccaaggtc accgtcaagg acgtcacctt 180
 caagaacatc actggcacct cctccacccc ggaggccatt agcctgctct gcactgccaa 240
 ggtcncatgc accggcgta ccatggatga cgtaacgta gagtatagcg gcaccaacaa 300
 caagaccatg gctatatgca cgaacgcaa gggcagcacc aagggttgcc tcaaggagct 360

tgcatgcttc tagaccctcc gtcgactgac ncatctctct agttataatt tttctctcgt 420
ccttgcatg catattag 438

<210> 3846
<211> 233
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-D12

<400> 3846

gtcaagaatt cacgggtcga cccacgcgtc cagttcctct cccccctggt tgtatggaag 60
attaccaata tgcagcgatt ttctcgcaaa gaaggagctc aatgcacatg cttgtttgtt 120
cacattcctt tttctgctct gagtttctgc tgatgcatgt gtacgacagt gtaatttgat 180
gtttgtccac gctttcgagc taaggcttta atctaaaata tcttctattg ttt 233

<210> 3847
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D2

<400> 3847

gggtcgagcc acgcgtccac ccacgcgtcc ggcggcggtat cgaggaggtg gtcgtggcgc 60
agtccgcggt gcaccggtgc ggcgcgtccg tggacttcgg cgccggtggg agcccgtgc 120
tgccccgac cgtgaacgcc gcctcgctgc acgcgcactt cgaggccgtc gccgccgaca 180
cggtcggcgc gggcgccgtc cgtggcgcca tggagccctg catgggcagc gaggacttcg 240
cgtccttctc ggcggccgtc cccgcctcgc acttctactt cgtcggcata gggaacgagg 300
cgatcggggc cgtgcacgcc gcgcactcgc cgcactttct tgtcgacgat ggtgcgctcc 360
cgtacggcgc cgcgatgcac gccaacctcg ccatcgagta c 401

<210> 3848
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-G4

<400> 3848

cacgcgtccg ggaccaggaa cggcaccgtg gtcagctacg accgccgctc gtcctatgatc 60
gacggccacc gggaaatctt cttctccggg tccatccact acccgcgag cccgccggac 120
atgtggccgg agctcatcgc caaggccaag gagggcgggc tcaacacat cgagacctac 180
gtgttctgga acatccacga gcccagagaag ggtgagttca acttcgaggg gcagaacgac 240
gtggtgaggt tcttccagct gatccaggag cagcagatgt acgccatggt ccggctcggg 300
cccttcatcc aggcagaatg gaaccacgga ggactgccct actggctaag ggagatccct 360
gacattgtgt tccggacgaa caacgagcca tacaagatgc acatggag 408

<210> 3849

<211> 436

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-037-Q1-E1-G5

<400> 3849

caggtctgga actcgcgggt cgacccacgc gtccaaatca agcacctcca cctccccgc 60
cggccaacaa ctcagccgcc gcaaccgcca catcagccat gggcgctgc gcaaccaagc 120
ccaagacgct tgaggggag gccccagctg aggccgctg ctccacaccc aaggttgccg 180
ccgaggccac tccaatctcc gttgaggttg cggctgatga acaggtagct gagaaggtgg 240
tggtggagga gccggctgcg gcgccgacg ttgagcatca gaaggctaag gagtggtcg 300
ctccagaggc ggccgctgcc gagcccgatc acaagganga ngaagccgtg gagaagaccg 360
tcgtcgagga agagaagcca gcggcagccg ccaatgcaga ggacaaggtc gccaccgccg 420
ccgagaccac gacgac 436

<210> 3850

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-G6

<400> 3850

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ctcctgctgt cgctgctggt cgccgtgcta gcggtggccg ccgatgtcgc caacgccggc 120
cacgccaagc ccctgacgcc tggcggggcg gtggtacacc acaaccacgg caagttcacg 180
gccggggccgt ggaaacccgc ccacgcgacc ttctacggcg ggcgggacgg gtccggcacc 240
acggcggggcg cgtgcgggta caaggacacg cgcgcgagg ggtatggcgt gcagacgggtg 300
gccgtgagca cggtgctgtt cggtgacggc gcggcctgcg gcgggtgcta cgaggtgcgc 360
tgctgggaca gccctagccg ggtgcaggcc cagcgcgggg aactggtgg tgacggcgac 420
cgacctgtgc ccgccaacg a 441

<210> 3851
<211> 420
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-037-Q1-E1-G7
<400> 3851

ccacgcgtcc gcccacgcgt ccgcccacgc gtccggtcca agccagaaaa cagtaaaatg 60
gcccaatgta agaccatcgt cgcagcagtc ctcgtggttg ctctcgtggt ttcgacgac 120
ccagccagcg ccgatacgaa cctggaacct gcaggaggct ctacggaggg cagtgcccg 180
acctccggca tgcagaagga agagaccga ggcaacaaga agccagcgac gctcgttgga 240
tctcttggtt caggcaagaa tgccatctac gggtaaatga ttagaaggaa tcctgcttcg 300
gaaggatatga aaacaatggg gatgtgctca acaatcaatc tcaaccccag gtgacggcaa 360
tgagtcaccc acaggaatgt aaccggatat agatggacat tgctcgttcc atatttcttt 420

<210> 3852
<211> 404
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-037-Q1-E1-G8
<400> 3852

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cctcgaacgc caggttcctt ggaccactat atccaggagc gacgaagtga tccacccgcc 120
agccatggag atgaagaagg tcctctgcgc cgccctcgtc gccgccgcct cggccaccgc 180
cgtgctggcc tcggtcgcct ccgaggcgcc ctccgaggcg cccgccggcg cggccggtgg 240
tgcggtggc cctagcgcaa gggcgccgc cgccgccgc gtgcccgcg cggggcgct 300
cgtcgcctcc ttctcgcct actacctca ctgagcgacg acgcgcgggg cggcaacgtt 360
gggatgcac gtgtntggt catccgatta attaattgtt tttt 404

<210> 3853
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-G9

<400> 3853
gggccagaat tcacgggtcg acccacgcgt ccgtccgcct caaggctctc atctcggatg 60
tctgataggc aacccaataa tggcagaagt cctatcatga tctcatgaac actgtctaag 120
ctctgcctta gatggacact acgacgagaa caggatatcc aatgtggaat acacagatga 180
cgacaagaaa gccgtgatcg cggctctgaa aaagaaggct ttgatcgcct cacagaagtt 240
tacgcattcc atgaacacgg ggatgaagag cagcaacgtg atgtccatct cgattctgga 300
tgagcgtgaa cctgaggagg tgcacgtgt ggatgccttc cgccagcttc ttgtacttga 360
agagctgcta ccacgcagc atgatgacta ccacatgatg ctaagatttc tcaaggcaag 420
atagtttgat atcgag 436

<210> 3854
<211> 421
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-037-Q1-E1-H10

<400> 3854
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ccaaagcttg cagagacttc ctccgtccat cagggcattg ctagagctta gatgcctttg 120
tctctatgga acttcnctaa gctatgtacc aaaggggtgtt ggtaaattga agcatctcaa 180

tcattctagat ggtctaataca ttgggtcatga caacaatgcg cctgaggggtt gtgacttaga 240
 tgaccttaaa gcattgtcag aactaaggca ccttcatata aagagtttgg atanggctac 300
 ttccggtgcg tctgcactcg caaacaagcc attcctagag gatctgtacc tctctgagca 360
 agcaccagca atagaaaatc aggaggatct ggangacaaa gatgaaacag aaaaagaaga 420
 g 421

<210> 3855
 <211> 436
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-H2

<400> 3855

cacgcgtccg gaacctcttc gcctcctcca ttgaccaaca attaagcctc cccgaccgcc 60
 acatctatta ggtgcagcca tgggtgcctg tgcaacgaag cctaagacgc ttgaggggaa 120
 agccccagct gaggccacca tctccacacc caaggttgca cctgagacca ctaccatcca 180
 cattgaggtt gcggcaaaac atgcagtagt tgagaagggtg gaggaggaca aggaggaggc 240
 actaacagtg gcggcgaaac aagagccagc agccaccatt gagcctcagc agattgctag 300
 tgaggtgacc acttcggaag tggcggtcgt cgttgtcgag cctgagaaca aagaggagga 360
 ggaagttgtg gagaagaccg tcattcgagaa ggagaagcca tcagcagtcc atgcaganga 420
 aaatattgcc cacaac 436

<210> 3856
 <211> 419
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-H3

<400> 3856

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 gccagtcgtg cccgcgcgcg gagaggatca tcgcggaggt gatgcagacg aagcagatgg 180

cgaacccgac gacggccgcg ggcattgctgc gcgtcttctt ccacgactgc ttcgtcaccg 240
 ggtgcgacgc gtcggtgctg atcgcgtnc a cccagttcca gaagtcggag cacgacgcgg 300
 agatcaacca ctgcgtcccc ggggacgcct tcgacgccgt ggtgcgcgcc aagctggccc 360
 tggagctgga gtgccccggg tgggtgtcctg cgccgacatc ctgcgctgg cgtcggggg 419

<210> 3857
 <211> 131
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-037-Q1-E1-H4

<400> 3857

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 aagtgcctac gtgtagccgc agctccctgt acacggacta ctacagccag tcatggggagc 120
 gcgccgacag g 131

<210> 3858
 <211> 422
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-H5

<400> 3858

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 tctctcctcc tcgccggccc aacctgattg ttcttcaacc aagaggaaga aaggaaggaa 120
 gggaccggaa gcatcagcca tgtcgaactc ggcgtcggga atggccgtct gtgatgaatg 180
 caagctcaag ttccaggagc tcaaggcaaa gaggagcttc cgcttcatcg tgttcaagat 240
 caacgagaac gtgcagcagg tgggtggtgga caggctgggg gggccaggag agagctacga 300
 cgccttcacg gcttgcttcc ccgccaacga gtgccgctac gccgtgttcg attttgactt 360
 cgtcactgac gagaactgcc anaagagcaa gatcttcttt atctcttggg ccccggatac 420
 at 422

<210> 3859

<211> 440
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-H6

 <400> 3859

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 gccaggaacc tacgttacia ggctcaccgg cttctccggc acactgtcct gctgcacggg 180
 caagccgtgc tgaaggccgg tgggcatcag gctgcttctt ctagctcatg gcctggccat 240
 gccaggctgc gctggctgcg tttcatttca tggaagaaag caaggatgga tcacagggtg 300
 tcgttctgct aattaatcta catacgtttg ctttcaagta ctgtgttgtg gcattgttac 360
 acatcacagt acagtttggg caaatTTTTT ttccacagag gaagtangga ttgatttaat 420
 cattgattta atccccacag 440

<210> 3860
 <211> 426
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-037-Q1-E1-H7

 <400> 3860

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 gtgagctcac caccacctcc agtgaagtct cctccgccac cagcaccagt tagctcccca 120
 ccacccccaa taaaatctcc tctccaccg gcaccagtta gctctctcc accagcacca 180
 gtgaagccac catcactacc accaccggcc ccagtaagct cacctctcc ggttgtcacc 240
 cctgccccgc cgaagaaaga agagcagtca ttaccaccac cagcagaatc ccaacctcca 300
 ccatcattca atgacatcat ctttccacct atcatggcca acaagtacgc atctccgcct 360
 cgccctcagt tccaagggtta ttaagcgcca cagagacatg gttgatgaag catgaaagga 420
 acagtc 426

<210> 3861
 <211> 414

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-037-Q1-E1-H8

 <400> 3861

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 gcagcaggtg gccgccgcgg cgcgggaggg cggcgtgggc ctggccggcg agaacgcgct 120
 gccgcgctac gacgacacgg cgcacgacca ggtggtggcc actgccgccg acagggccgc 180
 cgaggaccgc atggtggcct tcacgtacct gcgcatgggg cccgacctgt tccagccccga 240
 caactggcgc cgcttcgccg cgcttcgtcaa gcgcatgacg gagccggggc cgcgggaggg 300
 gtgccgggag caggtggagc gggaggccga gggcgtcgcg cacgccaccc agccccctcgt 360
 gcacgaggcc gccgtcgcg tcnacaactg accggaccgg ccggcgttcc ccgt 414

<210> 3862
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-037-Q1-E1-H9

 <400> 3862

 gggtcgacgc acgcgtctaa gataatccac acgaggacaa ccttgtcacc accggcaagg 60
 gaaagctcga cgggcagggg ccagccgtgt ggagcaagaa ctctgcgtc aagaagtacg 120
 actgcaagat ccttcccaac tcgctggtga tggacttcgt gaacaacggg gaggtgtccg 180
 ggatcacgct gctcaactcc aagttcttcc acatgaacat gtacaagtgc aaggacatgc 240
 tgatcaagga cgtcaatgtg acggcgcccc gggacagccc caacacggac ggcattccaca 300
 tgggcgactc gtccgggggc accatcacca acaccgtcat cggcgtcggc gacgactgca 360
 tctccatcgg ccccgggacc tccaaggtga acatcaccgg cgtgacctgc ggccccggcc 420
 acggcatcag catcg 435

<210> 3863
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A12

<400> 3863

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caaattaatc gactcgggtg gctccatctt ccgcggcagc gacgtcctgc cctgggtgcga 120
tcccgcacatc atcgccgggtt tcgagagtga ggttgctgag gctgcaaata aagaacagaa 180
aaccgagagc ctgatgaggc tctcctgggc gcttggtcac tctagacagc ctgaagatgt 240
caaccggggc atcggaatgc ttgaagcttc attggacagg tctagcagcc cagaggaaac 300
aagggagaag ctctacttgt tagctgttgg tcgttacaga actggggatt atacaagaag 360
ccgacagctt ttggaaagat gcttagagat ccaacatgac tggagacaag ccataactt 419

<210> 3864

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A3

<400> 3864

ggtcgacgca cgcgtccgca agctcctgct caccattcca agaataccttg agcttgctga 60
agagctgtct atgccacttg ctgctgtgaa gtactcccggt gggacgttca tctttcctgg 120
cgcacagcca gccccccaca ggagcttctc tgaggaagtt gctgcactta accgctactt 180
tggcggcctg aaatctggtg gtaatgctta tgtgattgga gatccagcaa gacctggaca 240
gaagtggcac gtcttctacg cactgagta ccagagcaa ccaatggta accttgagat 300
gtgcatgact ggtctggaca agaagaaagc ttgtgtcttt ttcaagacta atgctgatgg 360
gaacacaaca tgtgccaagg aaatgacaaa gctctctggc atctctgaaa tcatccccga 420
gatggagatc tgcgattttg ac 442

<210> 3865

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A4

<400> 3865

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gcagtcctgc agctcctgcc aaggcaccgc agtctgctgc cacgagaact gcccccgcta 120
aggcacctca agccgcctcc acccccgcgc ttgccgctgc cccatcgctg tcgtcgtcta 180
agaagtctgg tccagctgcc gcgccgacca acgccgcctc tacaccgtct tcttcacagg 240
acgaggagtt gagcccttcc ccgtcggcat ccaccgccga ggtggcgctc cctgccgctg 300
atgggcctgc tgagggaccg gcggctgctg atgcctccgg tgctgctacc cttggaagcg 360
gagctgccat cgctggtgtc gccgctgctg tcgctaccat gatcttctac tgagttcacc 420
a 421

<210> 3866
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A5

<400> 3866

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gtctgtcatt cctcgtgtac agaagaagct tagtgcctaa cacatgaatt aacggtacac 120
tgaatctatc acatgtctcg cctatatatg ttctgtttgg ccgtccatcg acttggacat 180
tttggaaacc acaaaccaca cagagcaata ctgaaaaaaaa tgtgggttta cagagaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggggggc cccccaaaag gttcaaagct 360
tacttacct tgaaggcaag ttcaaagccc tt 392

<210> 3867
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A6

<400> 3867

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cattagcatt tctggtaggc ggtgcctggt gtggctctcc caaggttccc ccgggtaaga 120

acatcacagc caaatatggg agtgattggc tagatgccaa ggcgacatgg tatggcaagc 180
 cgacaggtgc tggccccgac gacaatgggtg gcggtgcgg gtacaaggac gtgaataagg 240
 cccctttcaa tagcatgggc gcggtgtggca acgtcccat cttcaaggac ggtctaggtt 300
 gtggatcctg cttcgagatc aagtgtgaca agccagcgga gtgctctggc aagcccgtgg 360
 tgggtgtacat tacggacatg aactacgagc ccattgcggc ataccacttc gaccta 416

<210> 3868
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A7

<400> 3868

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 agttagatct actgcagcca gccttttgcg agcagccaca gcggtggcgg ccgcgccggc 120
 gtcggcttca cgctcatggc tcgtgccccaa cgaagctcaa gacgagctca tgcttgtgat 180
 cgtcaagcaa tcacgtcgtg atccgatcat tttgtggctc agggaaggcg ttgtaggaat 240
 gcagtgcgac tgatgttggt gttcattgcg cgggtgcgtaa ctacgctggc tgagagatta 300
 gaatgacatg ttgccagtac attacaagcg ctctgtctg atctctgttt cagaactagt 360
 ttgggaaatg taagatgaga ccgtggacgc caatgtttca gatcctcctc cttt 414

<210> 3869
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A8

<400> 3869

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 cggcgcgaat tgaactaacg acgacgtacg tgcgaccggg ccgggcggtg gattattccg 120
 gcctgagcaa tgggcaagat cgagtacggc gtggtggcgc gcggcgcggt ggtgctggcg 180
 gagcactacg gcgcggcggc ggcggggcgc aacgcgggcg ccgtggcgcg gcaggctcctg 240
 gagcgtctcc ctggcgggcg cgacgacgac tgcaacgtgt cgtacacgca ggacctccac 300

gtgttccacg tcaagcgac cgacggcctc acggcgtct gcatggccga cgacgccgcc 360
 gggcggcgtg tccccttcgc gttcctggag gacatccacg ggaggttcgt caaggcgta 419

<210> 3870
 <211> 153
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-A9

<400> 3870

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 tgcgctagcg accagttacg tgcaacctcg ccgggcgttg cgtcactcgg gtctgattaa 120
 tgcgcatggt ccattacggg gtgtcggcac gcg 153

<210> 3871
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B1

<400> 3871

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 tgcaactgca agcaaggaaa ttaattaaaa gaagatcggc gccatggcgg caacgacgac 120
 ggggatgcag atgatgcagg tgcagcaggc ggcggcgttg ctgctgtgct tggttgtgtt 180
 ggcggcgtct acgcgggtcg cgctgggcaa ctgccgcgac gactgcatgg ctgcatgcaa 240
 cggctggacc atcgtctgcc agctctcctg tgccagcgca tgctacggag aagtcgggat 300
 cacaacctta ggtacgtcgg ctgtattagc gaaagcagaa gcgcctgcat cagcaccaca 360
 agcagcacia gagcgaggcg ccgccgccgg cgtgtccgcg ctcagagggt tcaagctatc 420
 atcaccgacg acc 433

<210> 3872
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B10

<400> 3872

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catggcggcc gtccgggtccg acaggggtcca ccaccaccac cgccgctccg aggcgtcgtg 120
tccggcaacc tccgcggccg tggcggcggc gagggccgat gacgccctgc gccagcgccc 180
gcggggggtc gtgcagggtcc gggagcggga ccagggcccg ctgtcgacgg ggcaccagca 240
cctgcaccac catcaccacc agctgcggcg gtcggcggcg ttcccacccc gccgcccggg 300
gccggggcgc cgccctcctc agcgtgcga aagcgacctc aacatcaggg agcaccgctc 360
ctgcagcgag gtggccggcg gcaccgcggc gggctgcgc gctgtgtgct gct 413

<210> 3873

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B11

<400> 3873

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cactaatgag gaagctgttg ccatggtcaa gcctattcag gacccccagg aagcagcaaa 120
caagcttctc gaagaagcgt cccgaagggg aagctctgat aacatcaccg ttgtcatcgt 180
ccgcttccta tatggaacta ccggtgataa atcaggcgca gacaaagaga ccaccaatga 240
ccaaaactcc taattacctc ctgtagggat ccctcatgcg tgtgttttct tctggctggt 300
gtatctgatg ctcaaagtag atgctccgtg tgtcttcgcg tgctgttccg caaggaaact 360
gactcccccg accgtcgtcg tgatgctgcc cgctcatgct cctaaacggg aatgactgcc 420
gcagaatgac gaat 434

<210> 3874

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B12

<400> 3874

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ggataccgtg tccgagtcac ctgctccaag ccccgccccc gtctccgccc cttagttgcg 120
 tgttgggagc cgctgcccgc cggccccccg ccaccatgcg tcgtgtctgc gcgcgcacgc 180
 acgcattgaa cgggagatag aatatggtat cgttcaatgc agattgccat gctatagctc 240
 cagagtttat ctacctggta gcaccatgac acgatggccc gttcgtatct tctggccttc 300
 tcgtactttt cagttccatg gttttacaac accttttact cccagcagaa aatacataat 360
 atgcatggta ctctctttt ttttccgtat agtaataata acaaattttc a 411

<210> 3875
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B2

<400> 3875
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 caaggaaatt aattaaaaga agatcggcgc catggcggca acgacgacgg ggatgcagat 120
 gatgcagggtg cagcaggcgg cggcggttgct gctgtgcttg gttgtgttgg cggcgctctac 180
 gcgggtcgcg ctgggcaact gccgcgacga ctgcatggct gcatgcaacg ggtggaccat 240
 cgtctgccag ctctcctgtg ccagcgcgat ctacggagaa gtcgggatca caaccttagg 300
 tacgtcgggt gtattagcga aagcagaagc gcctgcatca atcaccacaa gcaggacaac 360
 aacgaggggc cgccgccggc atgtccgcgc tcagagggtt caggcgggtca tcagcg 416

<210> 3876
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B3

<400> 3876
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 ctctggcgt cgatgctgct cgtcgggctc gccgtgggct ccgatgagga ggaggacggc 120
 ggcggcaaaa agaagcccca cgtcaaccac ggcaagttaa aggcggagcc gtggacggac 180
 gggcacgcga cgtactacgg cgggcgcgac ggggttaactg acaccacgga cggcggcgcg 240

tgcggtctaca aaggcgagct ggggaaagac tacggcacc tgacggcggc cgtgggccc 300
 tcgctgtaca ccaacggcac cgggtgcggc gcgtgctatg agctcaatgg ccccaaaggc 360
 accgtggtgg tgacggccac caacgatgcc ccgccgccgg tgagcgggca aaaaggcgag 420
 cacttcgacc tcaccataac 440

<210> 3877

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B5

<400> 3877

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 caggatattg aacgatgtaa atgggaactt agatgctaag aaagcttgcg ctggagcatt 120
 gaaacttcac aaaaaatacc tgaaaaaggt acaagcaaag aaaccttaaa cgtgccatgg 180
 aacacacgtc cccaatgggg ctatcgttac catttcaaca tacacgacca ttttctacac 240
 acaactttga gtgaagattt atcggacaca ggtggtaatc gtctgacatg tcctgagata 300
 cacggagact gatggtgcc a ggctagtggg ttgagtacag gatgagcgca accggtagtg 360
 tgtatatcac gttctttgta ctcaagaatt ttgtacagac agaaggcggt gcggatagca 420
 tgccttgcac acataat 437

<210> 3878

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B6

<400> 3878

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 cctgcacgag gtggccaacc cgccggtgat ctaccgcgac ctcaaggcgt ccaacatcct 120
 ccttgacagg gacttcaacg ccaagctctc cgacttcggg ctccccaagc tgggccccat 180
 gggcgaccag agccacgtca gcaccagggt catgggcacg tacggctact gcgccccga 240
 gtacgccatg accggcaagc tcaccaagat gtccggacatc tacagcttcg gcgtcgtgct 300

gctcgagctc atcaccggcc gccgcgccat cgacgtcacg aggccgtccg aggagcaggt 360
cctcgttcag tgggtgagct gagcttttcg tttcgtttcg ttacgttttc caccagc 417

<210> 3879
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B7

<400> 3879

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gggccccaaa tctcaaaaag ctcaaaattt ctgaggaacg ggtgctgcct tcggaaaaaa 120
cttggctttc cgggcccggt tccccgttgt gggtttccgg aaccgccttg ggcttaagaa 180
ccaaggtatt cttgtggaag acatatacct cgctcgcgca gacaatttcc tggcaattcc 240
ccagtggggg ctaatgtctg gtggaactac actcctgctc atgtacatga gcaacatcgt 300
ctattttcac aagctcacc ctttctttta tgggtgtcgt cgctcgtaat aactaaccaa 360
ccgggtggag gtattcttcg cgccgtggat cgctgcctc ttcctcgcca tcggcgtgcc 420
gccgtccggt gccactgagc cctgcccga gt 452

<210> 3880
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-B8

<400> 3880

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taccgataa cccatgagga attcccctat tagggtacgg gtatgagaca aaaattgtcc 120
catgggtatg gatatgggac aaaatctcca ccattgggt aaacgggtat gggtttggga 180
agcaataatc cgaaccgat taccatggg tatttcatac gcgtacacct gtctgtttg 240
tatgaatgag ttgaggcca gtcggccatc aaaccggca ggctccattt cttatattgg 300
tccaagtac tgatttctt tctgatggat ggatgaatgg ataatggttc atgg 354

<210> 3881

<211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-B9

 <400> 3881

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 atcgcatgtg gctgtgtgta ggcagcccta tatacacttc ccgagtattt gtcagctctt 120
 gcatcatttg cttctaaagc ttgaaactaa tgattacaaa agaagggaaa aagaagtact 180
 agaggaagag aagcgcgtgc aaacatactc tccccaaatc attgagttct taaactacaa 240
 gactaacgtt ggaagctata aggagaacag aaatgaagac agtaaagcta gacctccaca 300
 agaagttcca ttgaatgaca gcgttccaga tgagcatttg aagaaaatta aattggagga 360
 tgtttcatgc cctctctgta tggagatgct gtatcaacct gctgttctta 410

<210> 3882
 <211> 455
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-C1

 <400> 3882

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 tcaagctcgc cgagtacttc aacgtcaccg acggggtgtt cagctacaac cagatgggag 120
 acgtgcccc cgccgttaac gggccactcc atgtcatccc caacgtcatc accgccgagt 180
 tccggacctt catcgagatc gtcttcgaga accccgagaa gagcatagac tccctccacc 240
 tcgacggcta cgccttcttc ggcgtcggga tggggcctgg gacgtggtcg ccggagatga 300
 ggaagacgta caacctactg gacacggtga gccggcacac gatccagggtg taccgcggt 360
 catggacggc gatcatgctg acattcgaca acgcgggcat gtggagcgtc cgggtccaacg 420
 tctgggagcg gtactacctc ggggagcagt tctac 455

<210> 3883
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-C10

<400> 3883

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gcctaccgtg gaaatcgccg gcggaacga tgacgacgac gcggccagct gcccggtctg 120
cctggaggac tacgcgcccg gcgagcgcgc ccgcgagatg ccctgcaggc acaggttcca 180
cggcaattgc atcgtgccgt ggctcgagat gcacagctcc tgccctgtct gccggttcca 240
gctgccggcc accgacgaca agagctcatg cagcggcggc gacggtggtt tcgtcagtgt 300
cgatgcggat cgtgaaggca gtgacaacgg cgggggtgat ggtagggcaa gctctccggg 360
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<210> 3884

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-C11

<400> 3884

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tcggccccgg gagcaagatg atccgcatcc atggcgtaa gtgcggcca ggccacggca 120
tcagcgtcgg cagcctgggg cgctacaagg acgagaagga cgtggaagac gtgcaggatga 180
cggggtgcac gatcgccggc accacgaacg gcctgcgcat caagtcgtac gaggactcca 240
agtcgtcgt caaggccagc aagttcctgt acgaggcat caccatggac aatgtctcct 300
accccatcat catcgaccag aagtactgcc ccaacaacat ctgcgtcaag tccggcgcct 360
ccaaggtggc cgtcaacgac gtcgtcttca agaacatcca cggcacctcc aacac 415

<210> 3885

<211> 365

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-038-Q1-E1-C12

<400> 3885

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gcggcgccgg cgaggcgcc gaatgcggta gatctaagaa gtacgttggt cgtccgaagg 120
tagggcagac agtcccgtgc ggaggagaga ggccggcgac gggatgctgg acgcgggtgg 180
acccgtccct cttcaagctc aagagcgaca ctttccgaaa agacaagaag aaatgcgcgg 240
ctccaaacta cgctgcctac tatccgatag gcgttgacct gtntgcctgc cccaagaagg 300
tccatcacat cgcgcagcac ctcgacgttc ggcagatcaa gacgcagcca aaagatcccc 360
tcgct 365

<210> 3886
<211> 80
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-C3

<400> 3886
attcacgggt cgaccacgc gtccgaaaaa aaaaagataa caaggaaaaa aatgacaggg 60
ctgacgtctt agaggatcaa 80

<210> 3887
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-C5

<400> 3887
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ccgccgatct ccgtgatcgg caagggcggg cggccgtggc tctgcctgcg ggcgcaccgc 120
gagggtggac gcctcgtgct gcggcagatg cgcctgccgt cgcaggagct gctgcagccc 180
tgcaaggagg acggcagggt caagctcctc atgcaccgg aggcccgcg gcggccgtgc 240
gggggaggca cactgcagga acggcaagg aatgatagct agcgctctta attgatcagc 300
tgatcagatg atctgccgcc acgcacacgt cgtcttgat gggctggctg ctacaatgca 360
accggtagat ctccctgctt agtttcttga gatcgagggc tccagttctt gctttgcatc 420
ctgcaaccgt tggtcacaat ctttgcc 447

<210> 3888
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-C6

<400> 3888

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gtccgggact cccgggtcga cacacgcctc tacagtgtg ctcaccaccg gcgtgggtggg 60
ctctagggcc ggcccgtgc tggccgggtg cgggttcttc gaggcggtga tcaccgggggt 120
cggcggccac gccgcctccc cccacaacac catagacccc gtcctggcag cctccagcgt 180
cgtgctcagc ctgcagagcc tcgtgtcgcg cgaggcggac ccgctggact cgcaggtggt 240
gacggtgacg aggttctctg gggcgggcgc gttcaacgtg gtcccgggct ccgtgacgat 300
cggcggaacg ttccggtgct tctcgaccga gggcttcttg cggctgaagc ggcggtatcga 360
ggaggtggtc gtggcgagc cgcgggtgca ccggtgcgcc gcgtccgtgg acttcggcgc 420
cggtgggagc ccgctg 436
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<210> 3889
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-C7

<400> 3889

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tgagccggca cacgatccag gtgtaccgcg ggtcatggac ggcaatcatg ctgacgttcg 180
acaacgcggg catgtggagc gtgcattcca acatctggga gcggtactac ctcggggagc 240
agttctacat cagcgtcgtc tcgccggcgc gatcactgcg cgacgagtac aacatgcccc 300
acaacgcctt ccgctgcggc aaggctcgtg ggtgccgct gccgccgtcc tacgcccccg 360
cgcgctaaga cgacgaaggc ctcgttttct cctcgtggtc tgaccatcca atccaaactc 420
aaaagaacat atacgacaga agcgt 445
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<210> 3890
 <211> 419

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-C8

 <400> 3890

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 gcccgctcct gtactctccg cgccaggcgc ggggctcgcg gttccgggcg ctggcgccga 120
 ccaccatccc gcgcatgtac cagccacca gcgcggtgct gcccgacgcc accgtgctcg 180
 tggccggcag caacaccaac tcggcctaca acttcagcgg cgtcgacttc cagaccgagg 240
 tgcgcgctga gcgcttcacc ccgccgtacc tcgccccgga gcgcgcggcc aaccgccccg 300
 cgatcgacgt ggccaccgtc cccggggacg gcatggcgta cggggccaag ttcacgttcc 360
 agttctcgac gcccggtgcag gccgtggccg agcccgaact aaaggtgacc atgtacgcg 419

<210> 3891
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-C9

 <400> 3891

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 aaggctggcg cgcactctcg ggctcaggcc accatgcac cgtgacacga ggctggaccg 180
 cgccctccat ggaaacttgc catggttctc cgcggaactg gtctgttccg tgcacggtc 240
 cgaggtctcg tctctggctc actgcaagag ccatggccgg cttgcacggt ccggcgatct 300
 ctgcaaatca tgccctcttt catgcacggc ggtaggtgcc cgtgaggagg tggatgaactc 360
 tcggcctacg acatccagca gcaggttgtg ttcttgctgt tctgatccgt tcaagaataa 420
 tactg 425

<210> 3892
 <211> 449
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-D1

<400> 3892

gggtccgaaac tcacgggtcg acccacgcgt ccggtcggag cagagagaga cttcctcgcc 60

tccatcccat cccgcgcgcg ccgtctctac ggtcgctaata aagccgcccgc atccagggat 120

ggagatgaag aagatcgctt gcgcgcgtct cgtcgccgcc tcggccaccg tggcgctggc 180

cgcgaggagcg ccgggtccgt ctcccaccag cggctcctcc gcggtcgcac ccgccatcgt 240

cggggcccgc gtggcctcct tcttcgcgta ctacattcac tgagccgccg gacgaggagc 300

cggagccgga gggaagagac caagggtggg ggagagactt ggctgccttg cgctgctctg 360

ctgctcccg cgcattccga tgcgtgggcg tgctctgatt gggcacggcg gtggcagtgg 420

cacaccttcg tcttcctttt gtttgtttt 449

<210> 3893

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-D10

<400> 3893

caggtctaga actcgccgggt cgacccacgc gtccagcgct ttcctgttcg caagagtggg 60

agctggaaaag gcattaccaa gagattttca gtgctttata atggtaagtg gctgaagaac 120

atggaatcaa catctccaag tgcagccagc agcagcagca cgcagctatc cccacgttct 180

ggttctgcag aaaagtcttg ctgcctatca aggggaagatg ttctccggtt tctcattgga 240

tgccttggtg ctcttgctcc catcccgtg actcagatat cttcccttgg agccatcaat 300

ccgcagtaca gttacgtgga agcatctgcg cctgcgatgg aagcaattca gaagatccct 360

caagacccat gcgccgttgc tgtagtggag acgatgccag atgggaactcg tagcatacta 420

ggagacatct ctacttacia gctgtg 446

<210> 3894

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-D11

<400> 3894

caaggtctag aattcgcggg ccgacccacg cgtccacca cgcgtccggc aagtgtgatc 60
atccgttgat ccatcttgct aataagcctg cgtgcccttc gttcttcctc gtctcgatcc 120
cgacgacgct ccgttcgggt ccggcaaacc acatcaagtc gcgatggaga tgaagaaggt 180
cgctcgccc gtcttcgccc ccgcccctc cgccaccgtg gtcttcgccc ccgaggcccc 240
ggcgcccgcc cccaccagcg cctcctcggc cgcgttcccg gccgtcggcg ccgtgctggg 300
cgctccgtg ctctccttct tcgcctacta cctgcagtaa aattaaagga ggatcggagg 360
gagaggctgc tggctgccat tgcctgtatt cggttggatt ccgtttatat atatatttaa 420
gtactttaat ttgggtctga acatgtcg 448

<210> 3895
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-D12

<400> 3895
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atccaaagtt ggaccgcaaa gatgagtact gctaactact atcagcacat caagtcaacc 120
aagcctgttg taggcaaagc aagaaaattg aaggatctca tgataaaaag tgataatagg 180
atatgtgctg actgtggtgc acctgatccc aaatgggcat ctactaatat tggagtgttt 240
ctttgcttaa aatgtggaga tgttcatagg gcacttgac ctgacatttc aaagggttta 300
tctgtaactt tggatgattg gtctgacagt gatatcgact ccatggttga gggtggtgga 360
aactcatatg caaattcaat ttatgaggct tttcttccaa aagatcacc aaaacccaaa 420
c 421

<210> 3896
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-C7

<400> 3896
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ctgctggtcg ccatgctagc ggtggccgcc gatgtcgcca acgcòggcca cgccaagccc 120
ctgacgcctg gcgggcgcgt ggtacacgac aaccacggca agttcacggc cgggccgtgg 180
aaaccagccc acgcgacctt ctacggcggg cgggacgggt ccggcaccac ggcgggcgcg 240
tgcggttaca aggacacgcg cgcgcagggg tacggcgtgc agacggtggc cgtgagcacg 300
gtgttgtttg gcgacggcgc ggctgcggc ggggtgctacg aagtgcggtg cgtggacaag 360
ccc 363

<210> 3897

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-C8

<400> 3897

tactggtcag gaattcccgg gcagaccac gcgtcagcgc ttccgctcca caggatcctc 60
tgcgccaccc acaaccgtgc gaccgtccgt gctgccggcg accccgatcc gccgaccctg 120
cccgccccac cacacccgag cggggctcgc agctatgtcg ccgtcggagc cgacgcggga 180
ggagagcgtg tacatggcca agctggcaga gcaggcggag cggtagcagg agatggtcga 240
gttcatggag cgcgtcgcgc gctccgccgg cggcgccggc ggaggggagg agctctccgt 300
ggaggagcgc aacctgctgt ccgtcgcta caagaacgtc atcggcgctc gcatggcctc 360
gtggc 365

<210> 3898

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-C9

<400> 3898

attcacgggc cgacgcacgc gtccacgtca taccgccggg caactacctg acgggcgggc 60
tggagctgaa gggcccctgc aagtcccca tcatcatccg tctcgacggc aacctgctcg 120
gcaccggcga ccggcagcgc gtaccaaagg aactggatcg agatcgagaa cgtcgagaac 180
ctgtccatca acggccacgg caccatcgac gggcaggagg ccctggtgtg gagcaagaac 240

cagtgccagc attcttataa ttgcaagatc ctcccgaata gcttgggtgct ggattttgtg 300
acgaacgtcc agatccgagg catcacgtg ctcaacagca agttcttcca cctcaacatc 360
ttcgagtga agaacgtgct gatcgacaaa gtgaccgtc 399

<210> 3899
<211> 355
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-D11

<400> 3899

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taaattgcac cgatcgagac acaggggaaca aaggcaacag ccatggcggg aaccctgtgc 120
cggtagctcc tcgtcggggc tgtcgcagcg ctcttagcca cgcctgcggc cgtggacgag 180
gccacgctgg cggagatctg caggggaacc gcgttccccg acatctgcac cagcacggtg 240
gggagcgagg cgcagagcgc cgggggtgtt gacgccatgg cgtgttgcg gatgcaggtg 300
gacgcgttca acaagcgcac cgaggcggcg agggcgcacg tcaaggaagc cgccg 355

<210> 3900
<211> 346
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-D3

<400> 3900

acgcgtcaag cggaagcggc ggcggcgcgg gggcccggcc gaacgtcgtc acggtggcga 60
tcctgatgtc ggcgtgcgag aagctgagga ggccggcgcc cgggcgggag gtccacgggt 120
acgcggcccc gaacgtggcc gcgctcgacc tccacgcgct caacgcgctg gtgcacatgt 180
acggcaggtg cgggcgggctc agggacgcga ggacggcggt cgccggcatc ggggcccggc 240
cgaggaacgc cgtgtcgtgg acggccatga tcgacgcgtg ccgcgagaac gggcgccccg 300
cggaggcgct ggggggtgtt gagagatgc gtcggctcgc tggcgc 346

<210> 3901
<211> 404

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-D6

 <400> 3901

 taccggtcag gaattcccg ggcgaccac gcgtcagcgt ggatgccggc gccacagcct 60
 ctctgtctgt cgctgctggt cgccgtgcta gcggtggccg ccgatgtcgc caacgccggc 120
 cagccaagc ccctgacgcc tggcggggcg gtggtacacc acaaccacgg caagttcacg 180
 gccgggccgt ggaaaccgc ccacgcgacc ttctacggcg ggcgggacgg gtccggcacc 240
 acggcgggcg cgtgcgggta caaggacacg cgcgcgcagg ggtatggcgt gcagacggtg 300
 gccgtgagca cgggtgctgt cggtgacggc gcggcctgcg gcgggtgcta cgaggtgcgc 360
 tgcgtggaca gccctagcgg gtgcaagccc agcgcggcga cact 404

<210> 3902
 <211> 349
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-D7

 <400> 3902

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 cccgcgtggt gcgttgattc ctccgggtcga accaacgcgc ggcgcgggggt cccggtcgcg 120
 gccatggcgc ggctgccgcc caagatcccc accgtagcgc cggcgtggcc ggagttcggg 180
 ggcgggcacc aacagcagcg cagccccctc gtgggcacgt tcctcgccgc cgcgccccatg 240
 cagccgtcgt ggggtggacga gttcctcgac ttctccgccg ccaagcgcgg cgcgcaccgc 300
 cgctccgtca gcgactccgt ggccttcctc gagcccgaac ccggccccg 349

<210> 3903
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-D8

 <400> 3903

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aggcctcgcc ttctcgggc ggtgctccct ccctcttcgt cccccagcga cgcaggcagg 120
 cgcgcgcgcg gccatgaagg ggggcggtgc catgaggccg tcgcctatgt tctacgtcca 180
 cgaggcggac gtcgtccaga tccaccactt cctcgaggag tgctccctct gcgccaaatc 240
 gctctccggc gacatcttca tgtacagggg tgacacgccg ttctgcagcg aggagtgcag 300
 ggagcagcag atcgaggtgg acagggcgaa gcaccggcgg aagaagcgcg cggcggcgca 360
 cgcgctgtcc gcacgcagca gggagcaccg ggcacagcag cagctgcaac aacaacaaca 420
 ac 422

<210> 3904
 <211> 379
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-031-Q1-E1-D9

<400> 3904
 cacgcgtcca ggccttttta ccgtgcttgt ccgttcgatt ccgaggtttg acaatgagct 60
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 tcaaatgata tttcgcaagg gacattttca gaagtttggt gatagagcag agagggctta 180
 caggagattt gtaagggtaa gactctccgt atctgagcgg aatgggagat ctagcatgtc 240
 cagggtgtgt gtctgtggtg taagagcttc ctcatctcag ctttaccgca acaagttcat 300
 cgaggccaag aagtcagacc tcactaatcc ggaagtagtg gaagctcaaa agaactgtcc 360
 cggtgcctta gtgttcttc 379

<210> 3905
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-031-Q1-E1-E11

<400> 3905
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 ggcgtggtgg cgcggaacct gccggtggag gagctggaca agtacgtgca gatgttccac 120

ctcatggaga aggaccacaa cggcaacctc acgctggagg agctcatgga cggcctccac 180
atcaacggcc agcccgtgcc ggagtcggag atcaggatgc tgctcgaggc cgccgacacg 240
gacggcaacg gcaccctgga ctgcgacgag ttcgtgacgg tgtccctgca cctcaagaag 300
atgagcaacg acgagtacct ggcgtcggcg ttcaggtact tcgacaagga cggcagcggc 360
ttcatcgagc ccgangagct gcnggatgaa ctggggccca acgaacaag 409

<210> 3906
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-E12

<400> 3906

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tgttgctggt gattgagctc gaggatgatg aaatgggggc tcagcagcgg cagccccgcg 120
gattcctact acgaggtacg gtcagattgg gcggacggtg tgcccaagat caagttcaag 180
atcaaggctg gcaaaacatt aagtgtcgg aaatggcaag ctgcatttag tcccgatggc 240
tgtcttgata ttgcctcagt cctaagccgg atacacagag gaagtgtcca tccgacagtc 300
agaggagagg tctgggaatt cttacttggg tgtttcgatc ccagaagtac ctttgatgaa 360
aggggaagaga tacgcaaata cggaggatac aatatg 396

<210> 3907
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-E5

<400> 3907

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acctctctg ctgtcgctgc tggtcgccgt gctagcgggt gccgccgatg tcgccaacgc 120
cggccacgcc aagccccgga cgcgtggcgg gcgtgtggta cagacaacc acggcaagtt 180
cacggccggg ccgtggaaac ccgccacgc gaccttctac ggcgggcggg acgggtccgg 240
caccacggcg ggcgcgtgcg ggtacaagga cacgcgcacg caggggtacg gcgtgcagac 300

ggtggccgtg agcacggtgc tgttcggtga cggcacggcc tgcggcgggt gctacgaagt 360
gcggtg 366

<210> 3908
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-E6

<400> 3908

gtaccggtca ggaattcccg ggcagacca cgcgtcagca gtgcccgaat ggacacacgc 60
tgtgttccac atgcaaggcc agagtacaca accgttgccc tacctgcagg caagagctgg 120
gcgacatcag gtgcctggcg ctggagaaaag tgcgccagtc tctggagctc ccctgcaggt 180
actactcgct ggggtgcccc gagatcatgc cttactacag caagataaag cactaggcgc 240
agtgcggcct gagaccgtac aactgcccct acgccggctc cgagtgcggc gcggccggcg 300
acatcccttc cctcgtctcc cacctgaggg acgaccacaa cgtggacatg cacagcggct 360
gcaccttcaa tcacagatac gtgaaatcca acccccggg aggtggaaaa agccaacttg 420
aa 422

<210> 3909
<211> 351
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-E7

<400> 3909

taccggtcag gaattcgcg gccgaccac gcgtcaggcc ggagcaaaaa gcttgtgcgt 60
ctggctgtct ccggccggcc gggcttgtcg tacgtcctcc aatccgttga cggtcaggcc 120
ctctagcttt tgctcgggtg tctggagaca gagcgagaga gagagagaga gagagaggta 180
gacggagatg gagtgcctgc tggggctgct caaggtgcgg gtggtgcgag gagtgcacct 240
ggcaatctgc gaccgcgtca cccacagcag cgaccctac gtcgtcctcc gccacggaaa 300
gcagaaagtg aaatcaagta taaaataccg cagcatcaac ccagaatgga a 351

<210> 3910

<211> 379
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-031-Q1-E1-E8

 <400> 3910

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 gcagatcatc gagctgtgcc ggatgagcaa ggatgccgag aagaagatcc atgccctcat 120
 cgacggctac gccgaccgcg ggggccgctc cctggggcgtg tcgtaccagc tggccccga 180
 gaagagcaag gagagcgccg gcgagccgtg gcagttcatc ggtctcctcc cgctgttcga 240
 cccgccgcgg cagcagcgcg cggagaccat ccgccgcgcg ctccacctgg gcgtgaacgt 300
 gaagatgata accggcgacc agctggccat cggcaatgag acggcgcggc gcctgngcat 360
 gggcagcaac atgtaccgg 379

<210> 3911
 <211> 257
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-E9

 <400> 3911

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 caccggggat tgggttcaat tggcggtcga aaaacaccgt ctttaatcgg gaaaatactc 120
 ttcgttaaca tatttaata cttttcaaca cgacccccct tcaacagcta gcgtcataat 180
 tttaaagccc gcacctatca aacttcccag cattttctca gtctgactct tcaaagtgat 240
 gccccctttc acagcct 257

<210> 3912
 <211> 136
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-F6

 <400> 3912

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 gccattttcca cccttt 136

<210> 3913
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-F8

<400> 3913

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 tcggtaggag cgtttgagat gagaactcct cctcgaagaa gaaccgtgga acagctctta 180
 gctctgcaac aggccatctc gcagctggaa gcgcacgtgc aagcaggaaa catttttctc 240
 ctgaagctcc ggtccctcat gcttgacgag tttcctcaga gcaccaacag agttgcagct 300
 gcactgggtg ctgtggctgc gatattcacg ttcgtgccct tgaggaccat cgttctacta 360
 atccttctag aagaatacac aagacaga 388

<210> 3914
 <211> 377
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-F9

<400> 3914

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 taggtgcttc gccatcatgt atagagcgtg agcgcggagt tgttgggggc ggatcaaccg 180
 aaacaccatg gattcttcgc cggagtctga tcctcaccgc cgagccgcta tttgctatgg 240
 agagccctcc cccaccgat ccattatgtg acgagcaagt gactgaggaa cccggagctc 300
 tgcaggtgga agactttaag gaggagctcg cagaagaaca tgaagaacca tctgggaaaa 360
 cagtgtacc acaaggg 377

<210> 3915
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-G11

 <400> 3915

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 accagtgcc a gcattcttac aattgcaaga tcctcccga tagcttggtg ctggattttg 120
 tgacgaacgt ccagatccgc ggcggcacgc ggctcaacag caagttcaaa aacctcaaca 180
 tcttcgagtg caagaacgtg ctgatcgaca aagtgcggt caaggcccc ggcgacagcc 240
 ccaacacgga cggcatccac atcggcgact ccagcaacgt gaccatcagc agcaccacca 300
 tcggcggtccg cgacgactgc atctccatcg gccccgggag caagatgatc cgcattccatg 360
 gcgtcaagtg cggcccatgc caggcatca gcctcggcag cctggggccc ctc 413

<210> 3916
 <211> 352
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-G6

 <400> 3916

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 agaaaaatac cagcttacca acaacagcag cagcaagccc acccgttcga cgacatggcc 120
 cgcctcgggg ccggcgccgt gttggcgctc ctagtggcgg tcgccgcggt ggccgcgttc 180
 ctgcggtgc cggcctcggc gaagtcggg gagctgagcg cgatgggggtt gctggcgggc 240
 aagggcgga gcggcgcggg cccgcagaac tgctcgggcg cgggtgggcga gtgcgacgtg 300
 gacgatgcgg aggagctcgg gctgagcggc ggcggcctcg gctccgacta cg 352

<210> 3917
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-031-Q1-E1-H7

 <400> 3917

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ccttgttcct cctggtcctc ttctgcatcg tgcattggtga gaaggaagag tcaaagggca 120
tcgatgcgaa ggcgtccggg cctggtgggt ccttcgacat caccaagttg ggcgctccg 180
gcaatggcaa gacagacagc acgaaggctg tgcaggaggc atgggcatcg gcgtagcgcg 240
gcactgggaa gcagacaatc ctcatacca agggcgactt ccttgtagga caactcaact 300
tcacaggccc ttgcaagggc gacgtgacca tccagggtga tggcaatctg ctggcgaac 359

<210> 3918

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-H8

<400> 3918

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tccttatggt gaataaagcg gaggcagaag cagaggcgaa atatctttct ggtgtaggta 120
tcgctaggca gcggcaggcg ataaccgacg gccttagaga gaacatcctg aacttctcac 180
actcggtgtc gggcaccagc gcgaaggagg tcatggacct gatcatggtc acgcagtact 240
tcgacaccat caaggagctc ggggacggct ccaagaacac cacgatcttc ataccacag 300
gaccaggcca cgtgaaggac atcagcgagc agatccgga cggcatgatg caggcctcaa 360
gcagcaacgt gtaaatacacc gactctctgc acgattggag acggctcggc 410

<210> 3919

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-031-Q1-E1-H9

<400> 3919

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tgatcgacca gatcaagcg gagatctccg tcatgagcct cgtccggcac cccaacgtcg 120
tgcagctgca cgaggtgatg gccagcaaga gcaagatata cttagccatg gaggtagtcc 180
ggggcgggca gctcttcgcc cggtcggccc gcggccggct caaggaggac gccgagagaa 240

ggtacttcca ccagctcgtc ggcgccgtcg acttctgcca cagccgcggc gtctaccacc 300
 gcgacctcaa gcccagagaac ctctcgtcg acgagcacgg caacctcaag gtctccgact 360
 tcggcctcag cgcgctcagg gag 383

<210> 3920
 <211> 408
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-A11

 <400> 3920

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 tcttcaatcc tccctccccg cgccggagtt ggaggagga gaggggacaa gctttccggc 120
 gccgacgccg acgcggaccc ggcgccgaca cgatccggtg gatcaagtgc atcacacctt 180
 tagggaggcc ccttgacag cagtttgtgc tgcaaattct atatagctct gtcgcagcat 240
 ggcctcgggtg ggcgtggcac gctcttcttt gggatttcag aatggcaciaa gttctagcag 300
 tgaccagat cgtcttccca acgagttggg cagtatgagc ataaaggacg acaaggacgt 360
 tgaagatant gttgtcaatg ggcaatgggg cggagcctgg tcatatca 408

<210> 3921
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-A12

 <400> 3921

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 cgtgccctac agctggatcat gagcgccgc ccaaccatgg cggcggcggc gcccggtgcgc 120
 gcctgggtgg tggcgctggc gctgggtgtg gcgtgcgcgc tgcctcagcc gcggccgtcc 180
 gacgccgcgg cgcagccgc cccgcagtcg ccggcgacgg cgggtgtcgtc gggcgccgcc 240
 aagcccaagt gcgtggccgg cgccaggaac gaccacgcgt gcccggtcgg cgcggtgcac 300
 gacccgggca gccaggagga tgagggtcc agcgtcacca tcgacgcga cgcgggccgc 360

gccccgacgac gtcggccacg acgaccggag cgactacaac gacccccgacg tgcccaac 418

<210> 3922

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-A4

<400> 3922

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aactactctg ccacaatccg gggaagaatc aacctagcgg taagcggaca tggcggcggc 120

gaagatagcg ccgtcgatgc tctcgtcgga ctttgccaac ctcgcttcgg aggctgagcg 180

catggtccgc ctaggcgcgc actggctaca tatggacatc atggatgggc acttcgttcc 240

taacctgact attggggctc cggatgatcca gagcttgagg aaacatacca aagcatat 300

ggactgccat cttatggtca caaagccttc agattacgta gaaccatttg gaaaggctgg 360

cgcttctgga ttcacattcc atatagaagt tgctagagac aactggcaag atctcatcca 420

aagcattaaa tcaaagggtg 440

<210> 3923

<211> 194

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-A5

<400> 3923

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caactaccat gacgtcactc gacacttata tgacgaatga ttcagtagcg gttggaacgg 120

ttgtatgctc ctgaaggact ggctcgctgt cgtcgaccaa gaaacagaat catcagccag 180

acgattcagg ctgc 194

<210> 3924

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-A6

<400> 3924

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cgtgttcggc gccgcgcccc tggaggtctc cgtgaagggt gccggcatcc actggcacta 120

ctgcagccgg tcccacgccc cggagctcac cgcggggtac tacaacacgc ggcgccacga 180

cgggtacctc accatcgcg cctcctctggc gcgccacggc tccgtgctca acttcacctg 240

cgtggagatg cgggaccacg agcagccgca ggaagcgcg tgcattgccg aggcgtctgt 300

ccggcaggtg ggcgccgagg cgcgcgccc cgggggtgggc ctgcgaggcg agaacgcgct 360

gccgcggtac gacggcacgg cgcacgac 388

<210> 3925

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-A7

<400> 3925

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attcgctctt tcttccacga ctgcttcac acgggttgcg acgcttccat tctcctggac 120

gagtcgcccc ccggcgacgt cccagagaag gagtcgtccg ccaacggctt caccctggtc 180

gggctcagaa ccatcgacat cgccaagtcc accgtagagg gcatgtgccc cggcaaggctc 240

tcgtgcgcag acatcctggc cttecgggcg cgcgacgccg ccgtggccgc gggcctcgcg 300

agatacgatg tcgcggcggg gcgccgcgac ggcatgcgct cgaacatgga cgacctcccg 360

ggcaacttcc ccgtgccggg ccaccacgtg ccgcgcctca ccgagctctt cagccagcgg 420

gg 422

<210> 3926

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-A8

<400> 3926

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cgatgcgggc acatgttgcg atggctgtgg cgttggtgtt cttggtgagc ggcgcatggt 120
gcggtcctcc caaagtcccc ccaggcaaga acatcacggc cacctatggc aaggactggt 180
tggacgctaa agcgacatgg tatggcaagc cgacgggtgc cgggtcccgac gacaacggtg 240
gcggtcgcgg gtacaaggac gtgaacaagc ccccttcaa tagcatgggc gcatgcggca 300
acatccccat cttcaaggat ggtctgggtt gtgggtcctg cttcgagatc aagtgcgata 360
agcctgtgga gtgctccggc aagcccgtgg tgggtgcacat cacggacatg aactatgagc 420
ctatcgcggc gtaccact 438

<210> 3927

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B10

<400> 3927

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gctcaccggg gcgggctcag catcctttcg aagaagtaac acttctccgt gaggcctgag 120
ccctcgcgag cggtgagcca agccggcgca cgtcgccccg gggctcacgc tcaccaccga 180
gccccaaacca attaataata tatatatata gctaggatcg atcgtcagta aaatggcagg 240
ctccgcccgc ctgaggagcc cctgtccgt cctcctctac atcctcgccg ccgtgccccg 300
caccgcccgc gcgacgccga ccgacgccgc catcgacgag gcgtacgcgc atctcgtaa 360
cctcaccgct aaccaggagt actgggcgga gcg 393

<210> 3928

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B11

<400> 3928

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ggctagacaa atactgagct agccttcaga aaaaaaaga aaagaaagag attgagaagc 120
agggagaaaa aatggcactg gccattgag gaagcttgag aaccagttaa caagaattgc 180

caacatattc ttggacaatc ttgttaacag agttttaagg tttcccagca gacatttttc 240
gagtccagga agagcgcgtg caaccaccac attcatataa ttaataagca aggttttagag 300
aagaggcaac atgggcacaa agatgaagaa ggggatcctg aagccgttcc gctatatctc 360
aaccatcatg gatggtaagg aggctgaaat gcaaattggg ttcccgcagc 409

<210> 3929

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B12

<400> 3929

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cgtccgcctc gcgcaggaca tatattcagt gatggaacac aaggaggccg gctgccagca 120
gccggagggc ccaatcctat gcatcaataa ctgtggtttc tttggaagcg ctgccaccat 180
gaacatgtgc tccaagtgcc acaaggagat gataatgaag caggagcagg cccagttggc 240
tgcctcctcc atcgatagca ttgtcaatgg cggtgataat gggaaaggac ctgcaattgc 300
tgcaactgta ggtgtggcag ttcctcaagt cgaggagaag actatcgccg tgcagcctat 360
gcatgtcgct gaaaccagcg aggctgctgc tg 392

<210> 3930

<211> 67

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B2

<400> 3930

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acaaaac 67

<210> 3931

<211> 444

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-032-Q1-E1-B4

<400> 3931

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gatctgcagg gccttcgggt ggccatcaag cagctggacc gcaatggctt ccagggaac 120

aacgagttca tgggtggaggt gctcatgctc agcatgctgc accaccccaa cctcgtcagc 180

ctcgtcgggt actgcgccga gggcgagcag cgctgctcg tctacgagta catggcacta 240

gggtccctcg aggaccacct gttattgctg cgtgacgatg gccatggcag ccctttgccc 300

tggcgcacga ggatgaagat cgcgctcggc gcggcgcggg gcttagagta cctgcacgaa 360

agcgtgtca tctaccggga cctcaagtcc tccaacatcc tcctcgnaca agactacgcg 420

cccaagctct ctgacttcgg cctc 444

<210> 3932

<211> 239

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B5

<400> 3932

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ggatccctca catggcagga ccttaaagct ggactgagg aagatgtcta cgtatccgat 120

tagtgacaag gagtatgctt acctcggcac acattctgtg cagatcatac acgacggagt 180

tcgtctcata ttccactat tgtcgtccc tgcaatttgt atacatgcca gattactct 239

<210> 3933

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B6

<400> 3933

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ccgtctgttc cgtccatcca ccgccccggc cgtctcccgg ccagatccct ctctgcaag 120

gtttctttgc ggtatggctg gttctctgtg gtttctcttc tgaatgtgct ggtgcgggtga 180

tgttggtttg atttgtgttc gctttggcgg atctggctgc gcacagagtg gccggagaag 240

atgatgggcg ggttcctctc cagggctctc ctgctggctt ttggctatgc ctatcctgcc 300
 tatgaatgct acaagaccgt tgaactgaac aaaccacaga ttgagcagct catatttttg 360
 tgtcagtatt ggattttagt tgccctgttg acagtttttg agagatttgg a 411

<210> 3934
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B7

<400> 3934

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 aagaaacaaa agtatgataa aattagtga aagaaaatgc ttacctcggc agagattctg 180
 tgcaaattctt acccgccgga gttcgtctca tatttccact attgtcgctc cctgcgattt 240
 gaagacaggc cagattactc ttcaatgaag aagctctttc gtgatgtatt tatacgggaa 300
 ggataccaat ttgattacgt atttgactgg actgcactca agtaccctca aatgggctcc 360
 aacaacaagc ttgttcaaca gaccaagtgc aagaatggct ggag 404

<210> 3935
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-B8

<400> 3935

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 aaccaggcct ccgagaagga ggccggcccc aacgtctccg tgaagggcta cgacgtgatc 120
 gaggagatca agacggagct ggagaagaag tgcccgaacg tgggtgctgtg cgcgacatc 180
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 ctgggacggc gcgactcgct cgtgtccaac cgcgaggacg ccgacaacct gccgggcccc 300
 gacatcgagg tgcccaagct catcgacgag ttcgacaagc agggcttcaa cgtcgaggag 360
 atggtcgcga tgctgggagg cgccacagc atcggcgctc gcagggtgctt cttcatcga 419

<210> 3936
 <211> 407
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-C10

<400> 3936

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 ttggtgcggc gccggccgcc gcgaacgcgc cgggcggggc gttcagcaac tgggtggcga 180
 tgaaccagca gagctacgcy ctgtacgcgc agaagtccgt cggggacggg ggcaaggagc 240
 ccctggacaa gaagctgtcg gaggcggaga agaagaaggt cacgtacngt ggtggaccca 300
 gcggcaaggc cgactacacc aacatcaccg cggcgctgga ggatatcccg gtgagcaaca 360
 ccaagcgctg gatcctggat ctcaagcccg gcgctcagtt ccgcgag 407

<210> 3937
 <211> 445
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-C12

<400> 3937

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 gtccgctgcc atcctctcca acacgaagat ggcgttcac agcaatgtcg cagtgaaggc 120
 ggcggccgtg gccgcgctgc tgctggtcgc agcgggtgcg cctgccgcgc gcgcggcgcc 180
 ggtggcggtg gcgggagggg cgcgcgtcgt gccggcggtt ccgctggaca tcgcgcagct 240
 gggcgccaag ggcgacggca agtcggacag cccccgatg atcctcaagg cgtggaagaa 300
 cgcgtgcgag gcgacggggg tacagaagat cgtcatcccg ccgggcaact acctgacggg 360
 cgggctggag ctgaagggcc cctgcaagtc ctccatcatc atccgtctcg acggcaacct 420
 gctcggcacc ggcgaactca gcgcg 445

<210> 3938

<211> 410
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-C2

 <400> 3938

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 cctcatcgac cacgccccct tccaggctcc cgtctccatg ggtctcctct caaacaggat 120
 tgggagggag agcctcaagg cgggtggatca tatctactcc tggagggcgg cgtgggtcta 180
 cgcgcatcac ggaatatatg tgggcgatga taaggatgac catttcacaa gaggaagagg 240
 acangaggtc ggaacaggaa ctgtcgtcga tattattctt gtgagttcac cccaaaacga 300
 agcaacacgc cttgcccggg gtgcaccgac gaaaccagcg acagcagcac agagacgaac 360
 ggcgtggtat cctcctgtct cagctgcttc ctaactgggg gtgctctcta 410

<210> 3939
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-C4

 <400> 3939

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 gtccgtgccc tacagctggt catgagcgcc cgcccaacca tggcggcggc ggcgcccgtg 120
 cggcctggg tggtagcgct ggcgctggtg ctggcgtgcg cgctgctcca gccgcggccg 180
 tccgacgccg cggcgcagcc cgccccgcag tcgccggcga cggcgggtgtc gtcgggcgcc 240
 gccaaagcca agtgcggtggc cggcgccagg aacgaccacg cgtgccgcgt cggcgccgtg 300
 cacgaccgag acagccagga ggaggagggc tccagcgtca ccatcgacgc gcccgccgcc 360
 gcgcccgcag acgtcggcca cgacgacggc agcgactaca acgacccga cgtgccaac 420
 aacgaacagc tcgt 434

<210> 3940
 <211> 107
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-C5

<400> 3940

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tcacacttca ggtcgccgcc aatcccgcga tgcataagg tcacacc 107

<210> 3941

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-C6

<400> 3941

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gactggtgcc attcgatttg atttggcgcg gggactttc ctatggccgc ctccatcgcg 120

gcctcgccct tctttccagg gtcgccggcg ccggccgctc ctaagaacgg ccttgagag 180

cgcccagaga gcctggacgt ccgcggcggt gcggcgaagc cgggagcctc gtctaagcc 240

gtgagggcgg gcaagacgcg cgcccacgct gccgtcccca aggtgaacgg tggcaagtct 300

gcggtggcgg atgtggaaca cgagaccgta actgtacctt cgtcagtgcc gaggactttc 360

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<210> 3942

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-C7

<400> 3942

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cgcgcgcggc ggcgggtggcg gtggcgggag ggcgcgcgtc ggtgccggcg ggtccgctgg 180

acatcgcgca gctggggcgc aagggcgacg gcaagtcgga cagcaccctg atgacctca 240

aggcgtggaa gaacgcgtgc gaggcgacgg ggtacagaa gatcgtcatc ccgccgggca 300

actacctgac ggcggggctg gagctgaagg gccctgcaa gtcctccatc atcatccgtc 360

tcgacggcaa cctgctcggc accggcgacc tcagcgcgta gcagaggaac tgga 414

<210> 3943
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-C8

<400> 3943

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ccgacgtacc accgccaccg caggagcgag atggagatga agaggatcct cttcgccgtc 180
ctcgtcgtca tcgccgctc ggccaccgca gtgctggcct ccaccgaggc cgccgccgcg 240
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gccgctggcg ccgccgccgc ggggccctcc gccagcagcg gcgcgcccgc cctcgccgcc 360
gcgcccgcg cgctcctctt ctccctcttc gcctactacc tccactaagc gtgtgcgtgc 420
ttacgta 427

<210> 3944
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-C9

<400> 3944

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tcttctttca cctctccaac atgaaggta acaccaagat caagctggag ccggtcatgg 240
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gtcgtcgtt cggccacatg gtgaccccg ccaccgacac a 401

<210> 3945
 <211> 438
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-D1

<400> 3945

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tacaacggca acgggtgg                                     438
  
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<210> 3946
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D10

<400> 3946

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gtagcgcggg aaatgccggc ggcggcggcc atgacgacga ggcgggtggt gctggagggtg 180
ctacggtcgg cctcccgcca cgccttcag gtggccttct ccttcgcggc gaggccgccc 240
gtgtccacca tgctcaagcc ggccatcacc aagcccctct accaccacca ccacgacaac 300
gactaatctg gcgcagatct acagcacggc cgtcggcatg ccttcacact ttcacagccc 360
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<210> 3947
 <211> 402
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D11

<400> 3947

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aagacttgat ttagttatgg acggattggg aggcctcttg aaagttcgag tgggtccgggg 180

tatcaacctt gcctaccgag acgcaagagg cagcgatccg tatgtcgtcc tacggcttgg 240

caagaagaaa ctgaagacaa gcgtgaagaa gagatccgtg aaccccatat ggcaagagga 300

gctaactctg accgtcacag atcccagcca accactgaag ctggaggtgt tcgacaagga 360

caccttcagc agagacgacc ccatgggaga cgcggaagtg ga 402

<210> 3948

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D3

<400> 3948

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gacgcctggc gggcgtgtgg tacacgacaa ccacggcaag ttcacggccg ggccgtggaa 180

acccgcccac gcgaacttct acggcggggc ggacgggtcc ggcaccacg cgggcgcgtg 240

cgggtacaag gacacgcgca cgcaggggta cggcgtgcag acggtggccc gtgagcacgg 300

tgctgttcgg tgacggcacg gcctgcggcg ggtgctacga ggtgcggtgc gtggacagcc 360

ctagcgggtg caagccccgac gcggcggcac tggtggtgac ggtgaccga 409

<210> 3949

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-A7

<400> 3949

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caccctcccc acgtgtctct ccgtcaccga caagaaactc ggctgcctca actacaccag 180
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gccggccgcg ttgccctccc ccgtcgcggc gcccgccgc cgcggaagg gtggttaagcg 360
caaga 365

<210> 3950
<211> 341
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-A8

<400> 3950

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cacgcatcgc caccctcccc acgctgtctc tcagtcacgc acaggggcat gcaggtcctc 180
aactacacca gggccgacga cgggcagatg tacttcgtcg ctcccggagc gccctgctgt 240
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<210> 3951
<211> 408
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-025-Q1-E1-B12

<400> 3951

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tgagcgacga gtgcaagctc aagttccagg agtcaagtc gaagcgaagc ttccggttca 180
tcacgttcaa gatcaacgag cagacgcagc aggtggtggt ggacaggctg gggcagccgg 240

gcgacaccta cgacgacttc accgggtcca tgcccagag cgagtgccgc tacgccgtct 300
 tcgacttcga cttcaccacc gacgagaact gccagaagag caagatcttg ttcattctct 360
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<210> 3952

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-B6

<400> 3952

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 cgccgggttc gtgaccaatg tcaccgagta catcgcgggc gccaaagtgga ggctggagtg 180
 caagcacttc ggcaccggca agctcgagcg ctccatcgac ggggtgaccg acgggaacgg 240
 cacgtacacg atcgagctca aggacagcca cgaggaggac atctgcgagg tggctcttgg 300
 ggagagcccg cgcaaggact gcgaccaggt gcaggcggac agggaccgcg ccggcgctct 360
 gtcaccagg aacgtcggca tcagcgacaa cctgcgcccc gccaaaccgg ctcggtctacc 420
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<210> 3953

<211> 137

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-B7

<400> 3953

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 aaaaaaaaaa ataaaaaaga aaaaaaaaca aaaaagtaaa aaggaggagg gcccaagagg 120
 tctaaatctt acttcgc 137

<210> 3954

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C6

<400> 3954

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ccagatcgcg ttggagtcgg tgcgtggaga gaagaacggt ctcggtggcc gtattcgctc 180
gccgccgccc cgacttcgcc ccacgccgtg gatcactccc tagccgccat ctctacctac 240
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gaacagggtac cataggatga ggcgcacatgga ggatgctgcg atgtgttcgt aagagggtcta 360
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<210> 3955

<211> 178

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C7

<400> 3955

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gaccatagat tgctccatag acaacagagc tcgtgtgaca tgggctacac cgaggctt 178

<210> 3956

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-C9

<400> 3956

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cccaacatca ccaccaacta caacggcaag tggctcaccg ccagggccac ctggtacggt 180
cagcccaacg gtgccggcgc tcctgacaac ggcggtgcgt gcgggatcaa gaacgtgaac 240
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ggctgaggct catgctacca agttagatgc aaggaaaaag cttgatgctc gggcaatcca 360
 gtcacgggtgt acatcactga catgaactac gaagcttata gcgccctacc aattcgactt 420
 tagcggcaag gc 432

<210> 3957
 <211> 328
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-D11

<400> 3957

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 accttccgcg tctcctgga aatgtccg 328

<210> 3958
 <211> 92
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-D12

<400> 3958

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<210> 3959
 <211> 427
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-D2

<400> 3959

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 cgtcgtcatc cagtccgacg agganganga cgagaggag atggggagcc acagaactaa 240
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 tccaccaccc aatgccaacg cccccggcaa cagaggcggg ccgagaggac cgggggcgcc 360
 gatggtcggc ggccccgcca agcccgtcag cattgacgtg cccgccaata ccctttgacg 420
 agtcaa 427

<210> 3960
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-D3

 <400> 3960

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 cggcagcgac gccgtcatgg agccggttgt tgctggcagc aacacggtag tagctgttgc 360
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<210> 3961
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-D4

 <400> 3961

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acctgatcct ccccccaat gttgcaacca tatctgacgt ggagatcaaa gagcacgggg 240
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aggccccgct caagtacccc ctttgcaccc gctttgctgt caagtccggt ggctaccgca 360
tcgccgacga cgctcatcccc gccgatttca aggccggcna cacctacaag aacacactca 420
gcatctaatac agcctctgat gatgaat 447

<210> 3962
<211> 265
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-025-Q1-E1-D6

<400> 3962

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tcggcagagg gcacttcggc gagggcgcct cgcacgcaga gttgtcacgg agtgcgacga 180
tgaggatgag gagacggata gggggagtca cgctcgtagg atgtcaggcg gcggtggcgc 240
cgaggaggag agctacgggc cgccg 265

<210> 3963
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-E1

<400> 3963

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cacgaacgcc aagggcagca ccaagggttg cctcaaggag cttgcatgct tctagaccct 240
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atgctatcca ttggtaacgc acaacagtaa atgacagac atccgacagc tatattaggt 360
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 tcaggtgtaa cctct 435

<210> 3964
 <211> 427
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-025-Q1-E1-E10
 <400> 3964

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<210> 3965
 <211> 389
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-E3
 <400> 3965

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 cgcgagccc gtggcggtgc gggaggtgat gcgcgcctcc ttcgaggcgt tcctgatggt 240
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ggacttccgg agcctgaggc ggcctttctc cacgtgcggn gaagggctgg tccccgagga 360
cgtggtggcg cgggaggcag agacggccg 389

<210> 3966
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-E5

<400> 3966

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gttgctgact agtgatgagt tgt 383

<210> 3967
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-E6

<400> 3967

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gggactcgca gcaccactgg ggcgtgcgcg gggagagcga cggcgacggc gtctccgtga 120
tggggtccag cgatatctgg atcgaccacc tgtccatgag cagctgcgcg gacgggctgg 180
tggacgcggt ggacggctcc accgccatca ccgtctccaa cggccacttc acgaggcacg 240
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ccgtcgctt caaccacttc ggcaaggggc tgggtgcagcg gatgccgcgc tgccgtcacg 360
gcttcttcca cgtggtgaac aacgactaca cgcac 395

<210> 3968

<211> 309
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-F1

 <400> 3968

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 ctccatatgg agagggcacc agacgacgca ggcacatcgg cagcttaaac gacccatgac 180
 ttactgacca ccnacggaga cggagcacaa agtggagggt gctctccttt tgggattttg 240
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<210> 3969
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-F11

 <400> 3969

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 gcggttccca ggccagctga actcggacct tcggaagctt gcggtcaacc tgatcccctt 240
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 gatgagcacc 430

<210> 3970
 <211> 450
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-025-Q1-E1-F4

<400> 3970

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cgtcctactt ccacgccttc ggcaaccccg acctcgcggc ggtggtctcc ggcgacggcg 180
gcagcgcgca ggcccaccgg ccgcgccgct ccaccgacgg cgccaaggcg gaggacggca 240
ggagccccac caccacaacg gcgaggcgcg cgccgtccat gttctgcgtc cccgacacgg 300
aggcggagga gccaacggc ttcttgagc agtgcacct ctgccgaag gcgctctgcy 360
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<210> 3971
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-025-Q1-E1-F5

<400> 3971

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tgctggatta caaaaggagg tgtgtccgcy atagtgtgct gcagtcacac acctctgtcc 180
atgaggattg caacattgag tctggagaaa caaccttgc ctgtgagcat gtgctgagcc 240
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ccaaganac accggttcca tcttcattct gatttttgtc agatgttcga gatggtgact 360
ttggcagcaa actatctggc agaagatcag aatgggtact agcatcctct a 411

<210> 3972
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-F6

<400> 3972

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gggcaggccc cagctgagggc cgccgtctcc acaccaagg ttgcgcccga ggccactcca 180
atctccgttg aggttgccgc tgatgaacag gtagctgaga aggtggtggt ggaggagccg 240
gctgcggcgg ccgacgttga gcatcagaag gctaataagg tgctcgctcc agaggcggcc 300
gtcgcggagc ccgaccacaa ggaggaggaa gccgtggaga agaccgtcgt cgaggaggag 360
aagccagcgg cagcagccca tgcagaggaa a 391

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<210> 3973
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-F7

<400> 3973

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ggctatgaga agcgcccttga gatcacattc tctgaggcac ctgtctttgt ggaccctcat 180
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tgcacaattg tgtctgagct ctccaacaag gatttcgact catatgtcct ttctgagtca 300
agcttgttta tctatcctct gaagattgtc atcaagacct gtggcactac caagctcctg 360
ctcaccattc caagaatcct tgagcttgct gaagagctgt ctatgccact tgctgctg 418

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<210> 3974
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-F8

<400> 3974

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atgagagcct tgttctctct ggtcctcttc tgcacgtgc atggtgagaa ggaagagtca 120

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aagggcatcg atgcgaaagc gtccgggcct ggtgggtcct tcgacatcac caagttgggc 180
gcctccggca atggcaagac agacagcacg aaggctgtgc aggaggcatg ggcacggcg 240
tgcggcggca ctgggaagca gacaatctc ataccaagg gtgacttcct tgcggacaa 300
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gcgaccacgg acctaagcca 380

<210> 3975
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-F9

<400> 3975

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cttctgctcg acgctgtgcg agggcaagaa ggggacggac ctggtcgtgt gcaaggagtc 120
ctgcgcgtc tcccagcagt ccaacctggt gctgtacggc aggatccagt gcaagggcaa 180
atgcaccgag cagaagggca tcacggcgcc ggccatgaag gtctgccagg aggagtgcga 240
caaggcgtag gtggtgaagg cggccgaggt caccaaggcc tgcagcgtca cctgcgcaa 300
ggagaagaac ccgcgcctca gcgagaactg caagaggtcc tgcaccctc ctcttcttg 360
aagcgaagcc ccttgaaatg aatgaaccat gcatgcatgc atgcatgtat gcatgcgccg 420
gggtgacgtg gcgt 434

<210> 3976
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-G1

<400> 3976

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gtttccctcg gcggtggatc agtggcggct tggtcgagat gggcgatgcg gttgatgaca 180
tcatctgtgc aacggatgcg gcggtcgccg tcgaggatgc ggccagtggg aagcccgcaa 240

tgctctctag cttagggggg caggggtgagg aagagcatga ggagaaggac aatgaggaca 300
 agtcaggcga gagcgagggtg atcaacccgc cagaagacgc tggcggggaa ggcacctcac 360
 ccctggaagg gttgaagcct cgcctttcca aggggaatca aagccatggg cctaattgc 418

<210> 3977

<211> 430

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-G3

<400> 3977

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 aggagtccat aatgaagttt tccaaggaca aaaccaaaaa ggtaaaaggg ttcacgtcag 180
 aatccactgt gagctacaga gatcggctga agatcatggc cggcctggtc aaaccggacg 240
 acctcaagct gggctctacc gaaaagaagc tcgtccaggc gtacaacgag aaaccagtcc 300
 tctcgcggcc ccagcacagc ttctacgaag gagaggacta ccttgangtg gaccttgaca 360
 tccaccggtt cagctacatt gctaagaang ggctggactc gttcaaggca cgcctcaaga 420
 acggcatcct 430

<210> 3978

<211> 258

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-G5

<400> 3978

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 ctcgttcaca catctaataa cgaaagggtc cgcctttttc ctccgacatc cacagggggg 120
 aggggaaaac gactgcattc acccggcggc agtactggcc tcggttccgg ctccggcgac 180
 gacgaccgcc gctgtaatcc tactcctatg cgtcgtcctc tcaactgtcca ctgctgacga 240
 ccccaacctc tcagacta 258

<210> 3979
 <211> 220
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-H10

 <400> 3979

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 ttcatcttac tagtgtggat ctataattcc attcaaaata tatacatgat ctaaatttca 120
 tgccaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaatgaaaga aaaaaaagga ggctcgctcaa aaggttcgat 220

<210> 3980
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-025-Q1-E1-H11

 <400> 3980

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 gcgtggaaag ccagtcttca tcagacgccg gacggacgac gacatcaagc ttgccaacag 180
 tgtggatgtg gcatccctgc gccacccaga gcaggatgca gagcgtgtga agaatcccga 240
 gtggctggtg gtcattggcg tgtgactca cctcggctgc atcccactac cgaacgccgg 300
 agactttggc ggctggttct gcccatgcca tggttccac tacgacatat ccgggaggat 360
 ccgcaagggc cctgcgccgt tcaacctga ggtcncgacc tacagtttct tggaggaga 419

<210> 3981
 <211> 463
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-025-Q1-E1-H2

 <400> 3981

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accgggtgca agccccgacgc ggcggaactg gtggtgacgg tgaccgacct gtgccccgcc 120
aacgaccagt ggtgcaagcc accgcgggag cacttcgacc tcagcatgcc cgcgttcctc 180
cagatcgcg aagagaaggc cggcatcgtg ccgatctcct accgcagggg ggcgtgctg 240
aagcagggcg gcatccggta caccatcacc gggaacaagt acttcaacat ggtgacgatc 300
accaatgtgg gcggcgctgg cgacatcgcg gcggtgtcgg tgaaggggag caagcgcgtc 360
aagtggacgg agatgaagcg caactggggg caagtgtggc agaacgggga aggaactcac 420
ctgcaattcg ctgacgttcc gggatgatgac cagcgaccac cgc 463

<210> 3982
<211> 52
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-H4

<400> 3982

cacgccaaaa ttgggggggt attatttga gtatcagtat aatcttgggc gt 52

<210> 3983
<211> 276
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-H6

<400> 3983

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aatagcagag tgagagattt ggatggatcc cccgcacgcg cccgcagacg tcgacctaat 120
ataatgaaca atgcgggggc ggccggaatc aatgaatcat cagtaacggg gtagaaatca 180
tgtcatgtca gggaaaaaac gaagcaccgg gacacacacg catgggcatg gggacaaatg 240
actgcgtggc gaggagctgc aatccacgga cgggga 276

<210> 3984
<211> 450
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-025-Q1-E1-H7

<400> 3984

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cggcagcgtc gcggagtacg tacaacctcc tggacacggt gagccggcac acgatccagg 180
tgtaccaag gtcgtggacg gcggtgatga tgacgttcga caacgcgggc atgtggagcg 240
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cgccggagcg gtcgctcagg gacgagtaca acatgccgga gaccagcctc cgctgcggca 360
aggtcgtcgg cctgccgatg ccaccgtcct accgcgccgt ctagagcgtc gaccgatcgc 420
gcacggtgct gtacacaact aaaggagagc 450

<210> 3985

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-025-Q1-E1-H9

<400> 3985

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agagcttttg gtgacctac ttgctacttc cacttgact cgccggattg atgaagctcc 180
tgcattgatt gcatgcggag tcttcaaggg gatttcagct ggcactcatg cattcaagta 240
aaggctcaa ttcgagatac cgggtgcgtt caataagcag gttcaacagt atctttcggt 300
aaaaaaaaca gctctgcttt tcgggcggct gctatgtcgc actgcacagt gtggcgtanc 360
gcagcgatgg caagctaatt cctaagaaaa aaacatacgt gcatatagaa aactgatat 420
tag 423

<210> 3986

<211> 247

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A1

<400> 3986

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tggaggccgg tggcggaggc ggcggcggcg gctactccac cccgagcgag gcagcgccat 120
ccacgcctgc cgctggggag acgacgaccc cttcgtcagg cggcgggttac tccacccta 180
gcgaggcagc gccatccacg cctgccgctg aggagacgac gacgactcct tcgtcaggcg 240
gcggggg 247

<210> 3987
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A11

<400> 3987

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gatacccttc ggacacgacg ccgtcgcctt gtccttcttc gtggcggtgtg tggccgccac 120
cgtcgcgctc gcgtcgtcca tgtgctcggc atgcggtcgc aagccgaagg cggccacccg 180
tgcagaccgg gccgcttcgg accagtccac cgggacgggc tcgggctccg tctccggtgg 240
cggcggaagc caggaggcta gcgccgcgga ggcggaggag gaagtgggtga gactgtcacc 300
ggagctggcg atgcacggcg ccatcgaccc ggtgacgctg ccgtcgtcga cgtcgaagcg 360
gcgcctgtcc atcagcgtga gcaagaagct gagcatgaac at 402

<210> 3988
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A12

<400> 3988

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ctcccggcgt tgggtttgtc gtcaccggcc gcatctactg cgacaactgc cgcgccgggt 180
tcgagacaaa cgtgtccac gccatccaag gcgcgacggt ggagatggag tgccgccact 240
tcgagtcgca gcaggtcac gacaaggcgg aggcgacgac gggccccggc ggctggtaca 300

ggatggagat cagcggcgac caccaggacg agatctgcga cgtgcgcctg ctcaagagcc 360
cgaggcggac tgcgccgaga 380

<210> 3989
<211> 106
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-026-Q1-E1-A2

<400> 3989

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cgctgcgcgg tggcgattct actcgtagcc agggatcggg atccac 106

<210> 3990
<211> 334
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A6

<400> 3990

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agctcttcag ccggctcttc gccagaagg agatgcggat cctcatggtc ggcctcgacg 180
ccgccggtaa aaccaccatc ctctacaagc tcaagctcgg cgagatcgtc accaccatcc 240
ccaccatcgg tttcaatgtt gaaactgttg agtacaagaa cattagcttc actgtctggg 300
atgtcggggg tcaggacaag attagacctc tttg 334

<210> 3991
<211> 268
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A7

<400> 3991

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tctagcgatc gcgtcggcct ccactccacc ttcccga aaa agcttaccct ttgtgtttgt 120
 gtgtctgtct ggcaatcgat cgatctccat gacgacgtcc ccgccgcgcg cagcctgtct 180
 cgccatggcg ctggcgctcg cctgcgtgct gctcgtcaag tccgcggacg ccgccacgcc 240
 cggcggctcc gcgtacgggt gcaaccgc 268

<210> 3992
 <211> 230
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-A8

<400> 3992

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 aagattcgca cgggccctgc gcacggaaga caagcataac tcgagagctg gtccatagtg 120
 ttagtgtgtc tgtctggcaa tcgatgaatc cccatgacga cgtccccgcc gcgcgcacgc 180
 ctgctcgcca tggcacgggg ggctgccctg caggatgcac gctaagttag 230

<210> 3993
 <211> 375
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-B11

<400> 3993

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 tccggccatg tcaaggaaaa tgtctcgcgc catagttgag gtcctcttcg acatcgctcg 120
 catcgctgcc ctgagagcgg cagaggcacc ggcagaatga acgcatgcaa gcagtcctgc 180
 caaggcaccg gacgaatgaa ctcatgcagg tagtgctgca gtcctgcca ctgcagccaa 240
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 agccgctgcg tcatcgacgt cgtcgtctac gaagtctggt ccaactgccg cgccgaccac 360
 agcctcctct acaac 375

<210> 3994
 <211> 347
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-026-Q1-E1-B4

<400> 3994

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cgcgaccact tcgccacctt catgggcaac accatcgtgg agatccaggt cggcatgggc 180

cctgccggcg agctgcgcta cccgtcctac ccggagagcg acggcacctg gtcgttcctt 240

ggcatcggcg agttccagtg ctacgacagg ttcagtctga gtagcttgaa ggcggtctgt 300

gaggccgtgg gcaagccgga gtggggcaac gcgggtccgg gcgactc 347

<210> 3995

<211> 300

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-B5

<400> 3995

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accatgcatt cgccggctcg ccatgtaaga aacaggggag ttgaaagtgc gacacaccag 120

agaacgtgtc tgtgtatact gtgtaaaggt cctaaaggaa agagaagatg cacatattca 180

aagcctcgga actaattgct ctgttgtcca ctatgttatc caagtatata tttgttcttc 240

acttgtgttg agcaaaaata aaaaaaacat aaaaaagggg cggccgctcc aaaaggttca 300

<210> 3996

<211> 322

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-B6

<400> 3996

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gatggccacc cgccggagcc ggggaagaag gaggatgtcg ccaccacggc cgccgggcct 120

ggagcaaacg atctggacga cccgcaattc atgtgtctgcg tatgtctgga tcttctgtac 180

aaaccagttg ttatatcatg tggatcatatg tcatgtttct ggtgtgtcca caaagctatg 240
catattttcc gggaatcgca ttgtgctgtg tgtacgcagc cctatatata cttccccgagt 300
atttggcaac tcctgcatca at 322

<210> 3997
<211> 318
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-B7

<400> 3997

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gcaccggtcg actcaccgaa cgcacgcagt cctgcagctc ctgccaaggc actcgaatct 120
gctgccacga gaactgcccc cgctaatacga cctcaagccg ccttcacatc cgccgttget 180
gctgctccat cgtcgtcgtc atctatgaaa tcagggtccac ctgccgcacc tatcagcgcc 240
gcctctacac cgtctttctc catcgacgaa gagtttagcc cttccccgctc ggcatccaat 300
cgcccaagtt gcctcccc 318

<210> 3998
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-B8

<400> 3998

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tcaccgaagg cagcagtcct tgcagctcct gccaaaggatc tcgaatctgc tgccacgaga 120
actgcacccg ctaatgcacc tcaagccgcc tccatctcct ccgttgctgc tgctccatcg 180
tcgtcgtcgt ctatgaagtc tgggtccacct gccgcaccta tcagctccgc ctctacaccg 240
tcttcttcca ccgacgaaga gttgagccct tccccgctcg tatccatcga cgaagttgcg 300
tcccctgtgt ctgatggggc agcttatgga tcggggagc 338

<210> 3999
<211> 328

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-B9

 <400> 3999

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 ggcaacgtgg tgcacctggt catccgcgtc ccggacgtgc gcctcatcac cgtggagacc 180
 gtgcaaggcg gcaagttcaa gttccgcctg gagccccggc gcaacgtccg gtacgttaag 240
 caacagattg ccaagggcca acccgccggc gcgccccccc gcgaacaacg ggtccttctc 300
 caaggcgaag gacttcaaga acggcaac 328

<210> 4000
 <211> 371
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-C10

 <400> 4000

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 ggtgatgcgc ggggaaggga agggcgccgc ggtcagggcc aagggtggccg agctgcagaa 120
 ggccgccgcc gaggggctcc gcgacggggg cgcgcgcccc gccgcgctgg ccgaggtggt 180
 acaggggtgg acgacgacga caggtggagg agagaaggac taagtgggtg tgactggtga 240
 tgccgacgcg attggcgctt gccacctgcc gcctgccgcc tggtgccaca acgattgtcc 300
 tcatccagac caactccaac ttgggccggg ccaaacgatt cgtttgttcc ttggccttgg 360
 gtaaaacttt g 371

<210> 4001
 <211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-C2

 <400> 4001

 cgggtcgacg caccgcgtccg agcgggtggt cggcgtctca ctatccacca ccgcgccgct 60

ccggtttaat ttctcctcga ccggccagcg caattctgtg gctcgatcga tcggtcggtc 120
gtaaggcaag tgagcaagct atatatatat ataggagatt cttcgagcga gctagtagcg 180
agatgggttc cgccgtcctc ttttactgca tctgcatcgc cgtcgtcgtc gcattgtcgt 240
cgtccatggt cgccgtcggg gccgccgcc cgggggaaac cccaagtgc atctcggcga 300
gcgcccttga gtgctccgct aacgtaacgg aaatagcaaa ggcgcgcaag ctgatcgatg 360

<210> 4002
<211> 341
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-C4

<400> 4002

gggtcgaccc acgcgtccga gccgggttcg agacaaacgt gtcccacgcc atccaaggcg 60
cgacggtgga gatggagtgc cgccacttcg agtcgcagca ggtccacgac aaggcggagg 120
cgacgacggg ccccgggcggc tggtagagga ttgagatcag cggcgaccac caggacgaga 180
tctgcgacgt gcgcctgctc aagagccccg aggcggactg cgccgagatc gaccactccc 240
gcgaccgctg ccgcgtcccg ctcaaccgca acgacggcat caagcagagc ggcgctccgct 300
acgccaaccc catcgcttc ctccgcaagg agccgctccc c 341

<210> 4003
<211> 322
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-C5

<400> 4003

cccgggccga cccacgcgtc cagtttatca cctctaagtt gtgatttttc atgggagact 60
cactgaagca gatgcacaca gatactttca gtagcttata gacggtgttg atttttgtca 120
caagaaaagg agtctaccat tgagacttaa aggatgctta gtgggtcaac ttagggatc 180
tttccttcta catacgacct atgggactcg ctttttggtg ggtgcccgtg cgatgccacg 240
gaacataaat tgcgaacctc caatggactt catttgagac aagtgatgcc caagaaaatg 300
ggggtaaact gacacagcta tc 322

<210> 4004
 <211> 350
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-C6

 <400> 4004

 gggtcgaccc acgcgtccgc ggacgcgtgg gttgcgccac tgctcgttat cctcctcttg 60
 cattgcattg caggctcgtag ttgagcagca gcaaccactg cacaggatgt cgtggcagac 120
 gtacgtcgat gagcacctca tgtgcgagat cgagggccac cacctgagct ctgccgccat 180
 agtcggccac gacggcgccg tttgggcccga gagcaccgca ttcccacagt tcaagccaga 240
 ggagatgacc aacatcatta aggacttcga cgagcctggg tttctggccc cgatcggcct 300
 cgtccttggc cccaacaagt acatggtcat ccaaggcgaa cccggggctg 350

<210> 4005
 <211> 455
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-013-Q1-E1-F8

 <400> 4005

 gggtcgaccc acgcatccga aggtggccac gatgacgact aataagcccc tcctcctcct 60
 cgccctggcg tccgcgctcc ttggtgcggc gccggccgcc gcgaacgcgc ccggcggggc 120
 gttcagcaac tgggtggcga tgaaccagca gagctacgcg ctgtacgcgc agaagtccgt 180
 cggggacggt ggcaaggagc ccctggacaa taagctgtcg gaggcggaga agaagaaggt 240
 cacgtacgtg gtggacccca gcggtgaagg cgactacacc aacatcaccg cggcgctgga 300
 ggatatcccg gtgagcaaca ccaagcgctg gatcctggat ctcaagcccc gcgctcagtt 360
 ccgcgagaag ctgttcctga acatcagcat gccgtgcac acgttccggt cggaccccat 420
 gaagcccgcc gtcgtggtct ggaacgacac tgcgg 455

<210> 4006
 <211> 373
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-013-Q1-E1-F9

<400> 4006

aattccaggg tcgacccacg cgtcagggtca gttcagggtac ggtggcgatg aggtcgtccg 60
tggcccgcct gattecgtcc tcctctgcct cgccctcccg tctcagtgga aatgcattct 120
tcggcaatgc cacacccagt gatcagaggc acattgagaa gcctttttaa gtgaaggagg 180
cagaacctgt gaatgtgaca aaaccttcac cacacaagct gctggttcta ngangaagtg 240
gtttcgttgg atcacacgtt tgcaaagagg ctttggacaa aggtttagtt gtctctagtc 300
ttaatagatc gggaaagcca tccttaaatg aaccttgggc tgacaaagtt atatggaacc 360
aaggcaacct cct 373

<210> 4007
<211> 455
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-G1

<400> 4007

gggtccaccc ccgcgtccga gtggatggcg gcgccacgac ctctcctgtt gtcgctgctg 60
gtcgccatgc tagcgggtggc cgccgatgtc gccaacgccg gccacgcaa gccctgacg 120
cctggcgggc gcgtggtaca cgacaaccac ggcaagttca cggccggggc gtggaaacca 180
gccacgcga cttctacgg cgggcgggac gggtcggca ccacggcggg cgctgcggg 240
tacaaggaca cgcgcgcgca ggggtacggc gtgcagacgg tggccgtgag cacggtgttg 300
tttggcgacg gcgcggcctg cggcgggtgc tacgaggtgc ggtgcgtgga cagccccagc 360
gggtgcaagc ccgacgcggc ggcgctggtg gtgacggcga ccgacctgtg cccaccaag 420
gacaagtggg gcaagccgcc gcaggagcac ttcga 455

<210> 4008
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-G11

<400> 4008

gaccgacgcg tcagggaaaa acttggcatt tccacaatca gacttgcttc tggtagcgcc 60
agaaattgtc aagaagacat actgtttgaa gatcaggcaa gagctgatgc atcgcttccc 120
agctgtgacg agtcgagtggt tgtagcaagc cttaaaattc agatttctct gttgaatata 180
agactgaggg cacttgaaga ggatcaggag ttcctcaatc aggtattgag ttcgctccaa 240
tgtggtagtg atgggctgca gtgtatacag gagataagca ggcacttagc agagttgcga 300
agagttgtgg ctactaaaa tgaaaatggt tttgccccga gttcacactt tttggccgctc 360
atgaggttct cctttgtaac ggcaaacctt tttgcagtca t 401

<210> 4009

<211> 405

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-G2

<400> 4009

gggtccacgc acgcgtccga ggcgacttcg gcctcagcac ctgctactac gccgaggtgg 60
agaaccacgg gcccgggcgc aacatgagcg aacgcgtaaa gtggaggggt atcaagaaca 120
tcacctacca gcacgcgctg cagaagtaca ccgtcgagag cttcatccag ggccagcact 180
ggctcccaca gctcggcgtg ccattcatcc cggggctgct gccgcagcag caatcgggca 240
ggatacactg acatctaagg aagataatat atgatcggca ggctgcgttg tcgatatgac 300
gtggcactaa catgtacgta ccatggttta gtttgttggt tggtttatgc tattttgact 360
actacttttt ttatatttga taaaaaatg cagtaaaaa ttaan 405

<210> 4010

<211> 385

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-G5

<400> 4010

ccacgcatcc gaaaactgcg tacaccatgt ccatcagaaa tactagttcc aattccaaca 60

catgcgctgt gcatcaaggt caacaccggg agttttttcg cacggtaatt tgaaaatgaa 120
atttgtggtgg aaactgtgta atccgccaat ccggtgcgga tctgcacaga gaaactctgg 180
tggctgctgt gactaatgaa aagtggttat tctggcttgg ccgttgcca tcgagggaga 240
tgtaatacct gatcagccct gaaatcttaa agggctccct tctttcctca tgctgggaca 300
acatttattt acatcgggtg tgtacttggg gttctctcca tcaccgaata tatgtcggcg 360
tgattgctgg tatctaaan aaann 385

<210> 4011

<211> 459

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-013-Q1-E1-G6

<400> 4011

atgcccggt cgaccacgc agtcgacca cgcgtccgt ctctctctc tctcggcctt 60
cttcgctgt ttccctcttt ttcttaggcc gccctctaca cttctcgaca taaccatcga 120
gagggcggtc gagagaaacg agagcggcag acaccatggg gagctcgagg accatcgttg 180
cgtccccct gtcctctctc gccctctctc tcttggttt cgcggccacc gccgaggccc 240
gcgttgctcc cgagctgttt ggcgaggacc aattccagcg gacatgcaac caggtgcact 300
tcaggaagat gtgccagagc ttgacgaggc tcccgagggt gaccacgccg cgcgagctgc 360
tgctggcgtc gatgcgcgtc gcggcgagga aggccangga ggccaagagc ggggtggacg 420
agttcgcggc gaggaaccac gagggccggc cgatggagt 459

<210> 4012

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-G7

<400> 4012

ccacgcgtcc gacggtggcc acgatgacga ctaataagcc cctcctctc ctcgccctgg 60
cgtccgcgt ccttggtgcg gcgccggccg ccgcgaacgc gcccggcggg gcgttcagca 120
actgggtggc gatgaaccag cagagctacg cgctgtacgc gcagaagtcc gtcggggacg 180

ggggcaagga gcccctggac aagaagctgt cggaggcgga gaagaagaag gtcacgtacg 240
 tgggtggaccc cagcggcaag ggcgactaca ccaacatcac cgcggcgctg gaggatatcc 300
 cggtgagcaa caccaagcgc gtgatcctgg atctcaagcc cggcgctcag ttccgcgaga 360
 agctgttcct gaacatcagc aagccgttca tcacgttccg gtcggacccc aagaagcccc 420
 ccgtcgtggt ctggaacgac actgc 445

<210> 4013
 <211> 448
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-G8

<400> 4013
 .
 cccacgcac cgaaacgggt tcactctctgc cgccgagctc cgccatgtca tgacaaatct 60
 tggggagaag ctaactgatg aggaggtaga cgagatgac cgtgaggctg atgtcgatgg 120
 tgatggccag attaactacg aggagtttgt taaggatcat atggccaagt gagccacaga 180
 agcataagct caaggcagag aggattgtgc attgcatatt agtcaagatg caatgcaact 240
 cttatttcat cgacttccag tgaaacattc tgctagtgtg agtttttgaa aggcaatgca 300
 gttgctgctt tgttcttccc tccagtgtgt ttccagaact gttgattcat gtgaaactgt 360
 aatgattgcc ctccctgctg tgtcttggtt gcagttgana ccatatgtag ctacattccc 420
 cctccacaca cctccacaca tcaacttc 448

<210> 4014
 <211> 397
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-013-Q1-E1-G9

<400> 4014
 aattcaaggg ccgaccgacg cgtcagattt ccaagaacag tgttgctaga agattctcga 60
 ccgggactct atctacgatg aaatctcata gcaatgcacc tgcaaaatca aacggtttat 120
 ctaggactgg tgtacaaaga aaacttcact tggatcgta gccaccgcag aagagtacaa 180

aaccgaccga gaacagcaat aagctagcta caaatcgggt cccagcccgg aacagcccag 240
ggaatcctgt acttaggcat tcacgcagct tgcctgaaac tggtcgacga gcagtacaga 300
aggtctcatc aatcacagag aaactgtcgc aaatgtcggg gacctccaga acacgaagcg 360
ccgtgaagcc tgccngcccg acgatgaaag cccgaca 397

<210> 4015
<211> 455
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-013-Q1-E1-H3

<400> 4015

gggtccaccc acgcgtccga ccgcattctc tcgttcgcgg agatccaggc ggccaccaag 60
aacttcgaca aaaaggcaat catcggcttg gccgggtccg gcaacttgta cgtcggggag 120
atcgacgacg gcacaaagggt ggcggtgaag cgcggggagcg cggagtccga gcagggcatc 180
aacgagttca acacggagat ccagatgctg tcgaagctgc ggaccggca cctggtgtcg 240
ctgatcggct actgcgacga gaaccaggag atgatcctgg tgtacgagta catgcacaac 300
ggcgtgttcc gggaccacat ctacggcagc gaggggaagg cgccgctgcc gtggaagcag 360
cggctggaga tctgcacng cgcgggcggg gggctgcact acntgcacac gggcacggcg 420
caagggatca tccaccgcga cgtgaagacc accaa 455

<210> 4016
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-H5

<400> 4016

ccacgcatcc gaccacgcgt ccgggaacat ccatcgatct ccccccagcg gcgaggagag 60
ccggcggcca caggaaggag aaatggcttc cgcacacaac gctctccggg tgtttttcat 120
cctagccgtg gtatgtgccg tatgcacagc gaaaaggaca ggagccaaga aggaagaatc 180
ggcggcagcc cctggtggtg ctgctggagg cagcggcggg acgttcgaca tctccaagct 240

cggcgcgacc agcgacggca agacggactg cacaaaggca gtccaggacg cgtggacgtc 300
 agcgtgcgaa gcgaccggaa ggcgccagggt ggtgatcccc aagggcgact acctggtcgg 360
 ccctctcaac ttcactgggc catgcaaggg cagcagcatc gccatccagc tggatggcaa 420
 cctgctggga tcaaacgacc tga 443

<210> 4017
 <211> 324
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-013-Q1-E1-H7

<400> 4017

accacgcat ccgagcggcg ccgccagcga ctacaacgct tcgttccttg aagagttccg 60
 aaccaagggt gccaacggga acgactctgt ccgctatgaa gacaggacag tgggagggaa 120
 agaggaagtc gttgaggcga tcaaggcaac agggcggtgc aacctgttcc tcgtctgaca 180
 gggcacgcac tgcattgccg tggttgactg gaccacggac agcccggagc tcgtgccggt 240
 gggactttac ctggcgctgc cggaattctc gacggtggca tctgtgctgg tcatgaaaca 300
 gtacgatccg atggcgaagc acga 324

<210> 4018
 <211> 162
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-A1

<400> 4018

cccacgcgtc cgagactgca atcatcgtca ttacttaaaa tacgatcgga gccatgtagg 60
 aaaagactac ggggatgcac atgttccagg tgcaccaggc ggatgcgtag ctgctgttct 120
 tggttgtgtt ggctccgtta cccgggtcac ccaggggacc tc 162

<210> 4019
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-A3

<400> 4019

cggtcgaccc acgcgaccga ggaggcctac ggttgcgag gaatgctgtg ccccaaatg 60
 ggaaccgagg accgcgcaaa cggttcatg cacaacttca agaacacaac caatttcggc 120
 ctcatggccg tcagcctcgg ctactacgaa acgctcatgt cctgctccgg aagcagcacc 180
 agcatcgaga tgccgcccga ggaccgcgcg cgcgcgggca tctcaccggg cctcgtccgc 240
 atgtccgtcg gctacaacgg cacgtggag cagcgtggg cgagttcga gcgcgcgctc 300
 gcgctcatgc aaactccgaa gcccgaagaa catcctcaag ccgccgccgc cgaccgcgac 360
 ggccccgaag ccgccaacat acagcaccgc aagcactgac gcgcttgccg ttccgagcgt 420
 gcatggcctg tgtgggactg 440

<210> 4020

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-A7

<400> 4020

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 tctacgcgtg gataacctgg tcatcaccgg caagggaac cttgacgggc agggcccagc 120
 tgtgtggagc aagaactcct gcaccaagaa gtacgactgc aagatcctc ccaactcgct 180
 ggtgatggac ttcgtgaaca acggggaggt gtccggggtc acgctgctca actccaagtt 240
 cttccacatg aacatgtacc ggtgcaagga catgctgac aaggacgtga ccgtgacggc 300
 gcccggggac agccccaaca cggatggcat ccacatgggc gactcatccg ggatcaccat 360
 caccaacacc gtcattggcg tcggcgacga ctgcatctcc atcggccccg ggacctcaa 420
 ggtgaacatc accggcgtga cctg 444

<210> 4021

<211> 262

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-A9

<400> 4021

gggtggcccc acgcgtccgg aaatcacctg cgaaaagcag tctcccaatt ccaccgaata 60
 actaataaca tctcctcgag cgcgaggccg gcttccttgg accaatccag cagcaagcga 120
 cccggccagc accagcagcc atggagatga agaaggctct ctgcgccgcg ctgcgtcgccg 180
 ccgcctccgc caccgccgtg ctggccgagg tcgcctccga gtcgccctcc gaggcgcccg 240
 ccggcgccggc cgctctagag ga 262

<210> 4022
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-B10

<400> 4022

gggtccggtat tccgggtggc ccacgcgtcc gaaaagattc tccgtactct agcagatggc 60
 aaggataaag cctaagcaat tgctaatacca aagcaaaaca aagaaggctc catctcgaat 120
 cagctactct actatcatca catggaactt gattgtcata ttggttgtgc tatctctcta 180
 tgctacctac agccattggc atcaaaggctc taccgaagac ttcgaaatgg agcttcatga 240
 agctgagctt gctgtgagac cggaggattc aaaaatgata agtagaccaa gatatgcggt 300
 aatgaacacc gcaaaagggc caattactat agaaatatac aaagatgctt ctgctgacgt 360
 tgtggataga tttatcaact tgtgcaagag ttatcatttc aaaggaatgc catttcggca 420
 tatcat 426

<210> 4023
 <211> 452
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-B12

<400> 4023

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 acggcctgcg catcaagtcg tacgaggact ccaagtcgtc gctcaaggcc accaagttcc 180
 tgtaccagga cgtcaccatg gacaacgtct cctaccccat catcatagac cagaagtact 240

gcccacaaca catctgcgtc aagtcggcg cctccaaggt ggccgtcaac gacgtcgtct 300
 tcaagaacaa ccacggcacc tccaacaagc cggaagccat cacgtcaac tgcgccaaca 360
 acctgccctg ccagggcggtg cagctcatca acgtcgacat caagtacaac aggtccgaca 420
 acatgaccat gtccgtctgc aagaacgcca tc 452

<210> 4024

<211> 444

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-014-Q1-E1-B6

<400> 4024

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 aggccataga cgccatctgc aagagccacg gaacaccacc agatgagaag attgccatca 120
 ccaaagctat tataaatgta tcgaatggat ccaagcccc actctttgct ggcatcatag 180
 cacttgtgat gagcatcgca acgatgggtc gtctgacctg cagcatgatg cctgggaagg 240
 ttctcggtgc tgccataggt ggagctacct tctcagaagg taaatcaaaa gtacaagagc 300
 gccagcggtc caagctatca gaagaggctg tggaggaagc tgaagacgcc gtctctgcaa 360
 agcgctctc ggagcttgag gagaaggctc ttgcactcct gacaaaacct gcatcaatgc 420
 ctgctgataa ggangagggt ctgc 444

<210> 4025

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-B8

<400> 4025

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 agcggcgcat ggtgcgggtc tcccaaagtc ccccgaggca agaacatcac ggccacctat 180
 ggcaaggact ggctggacgc taaagcgaca tggatggca agccgacggg tgccgggtccc 240
 gatgacaacg gtggcgggtg cgggtacaag gacgtgaaca agccccctt caatagcatg 300

ggcgcatgcg gcaacatccc catcttcaag gatggtctgg gttgtgggtc ctgcttcgag 360
atcaagtgcg ataagcctgt ggagtgtcc ggcaagcccc tgggtggtgca cataacggac 420
atgaactatg agcctatcgc ggcgt 445

<210> 4026
<211> 437
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-014-Q1-E1-C11
<400> 4026

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ccccgaggcg gactgcgccg agatcgacca ctcccgcgac cgctgccgcg tncgctcac 120
ccgcaacgac ggcataaagc agagcggcgt ccgctacgcc aaccccatcg ccttcctccg 180
caaggagccg ctccccaaact gcggcgagct gctccgcgcc tacgacctct acaacgagac 240
gtccgagaat tcctaagcgt ccaaacaaaa gttctctcgc tcgctttttt tttaaaaaaa 300
aaatcccata tacatatagc acatttgttt cggtttggtg atgcgcgcat gcatgctagc 360
agacatcttt cctaaaaaaa atttaaataa tttccatctc gcattatttt agtagctacc 420
attcatgttt tctgagt 437

<210> 4027
<211> 440
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-014-Q1-E1-C2
<400> 4027

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tcggaggctg ccgtcgctcg cgtcggccgc ccccgccggc cagcgagagc gagggacaac 120
gaccgaccga ccgaccagct cgaggtgaat gaacagccgc ataccgttcc tccagaaaat 180
gcaccgctgg atcatcccta gctgcggcga caccgcccag ccgcgccctt cctcccgcca 240
tcgagatgcg ttcccaggcg cggcgctcggc gtcggcgctc gcgtcggcgg ccccgctccc 300

tcagaagctg aggaaggtgg ggtcggaggg gacgctggtg ctgtccgtgc ccaaggacgt 360
agaggagatc cggaccatgt cggcgtacgg ccgcctcaag ctcttcacct accacgagct 420
caggaaggcc accggcaact 440

<210> 4028
<211> 240
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C5

<400> 4028

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agtgccaggt caagatcagg tactgcagga tgaggcgcac ggtggatgct gtgatgagtt 120
cgtgagtggc ctaggcgcgc gtctcccagt caactttggt ttgctggacc gttgtctcct 180
tataatgtaa ttattttatt tgtatataac tccgattata tagtaaagat gtgacattca 240

<210> 4029
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C6

<400> 4029

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tcgcgagga agccgatccg cgggcactgc cggcacagtg gaccaccgcg aagaagtaca 180
aggccacgat ggacgccaag acgcggcagg ctttcgacgg cgtggtggcc gccgctacgg 240
cagagaagcg gtcccaggcg gtggaggccg tgctgcagca gcagctgaac atggacgtgt 300
ccctgtccaa ggcgacgtct tccggggacg agaacaacta cgtgagcgtg gccgccgcct 360
acgagaaggc cgcggggcgc gtcacgcggc cgacgccgga caacaagctc cgcgctatgg 420
cgttcgc 427

<210> 4030
<211> 435
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C7

<400> 4030

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aaaggtaatg gagtcgtcac gcatgttcca gccggccatc atcctgcttc tcctgctcat 120

tgtgaccacc gatgtggcgc aggcggcgag ggaatgcgag aaggacagcg agcgattcct 180

tggggcatgc atggcgctcg acaactgcgc caacgtgtgc cgcggtgagg gcttctccgg 240

cggcaggtgc agcaccttcc gccgccgctg catctgcact aagccgtgct aaattaacct 300

actcccggca gttcgatggg ggacgtttat tctatttatt ggcttacttg attttttccc 360

ccctaacaat aagaaaacgc acgtgctggc atgtacgttg tgttgatat gcttttcttg 420

ctggcttcat ttgct 435

<210> 4031

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-C8

<400> 4031

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ccgagccgtg cgggggctcg ggacgggaac gggacaggac cccaaaatct cagatccttc 120

ctgcccgcc gcccggtccc gtcgacgcgt cgttcttgcc ggccgcgcct cacctccgcc 180

ctctcctcct ccagggggat cggatacgcc acaggctgcg cgatgggtgct gtgggtcttc 240

ggctacggct ccctcatctg gaaccccggc ttcgacttcg acgacaaaat cctcggcttc 300

atcaagggct acaagcgcac ctttaatctc gcttgattg accacagagg cacaccggag 360

catccggcga ggacctgcac gcttgaaacc gacgacgagg ccatatgctg gggaattgca 420

tattgtgtca aagggtggtc agaaaaagag 450

<210> 4032

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-D8

<400> 4032

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ggacaacctg ggagcctgcc gccgcgccat cggcttcaag gacgccgtca ccatccgcgc 180
caccatgggc atggcggcgc aggacatgca gaactgcgac gagcagttca ggcagatcgg 240
cgagaagaac cccatggagc agttcgacgc gtcgctcgtc gagatgtccg agaactgccg 300
ctcgtctctc aacatgatct gatcgatctc cttctccacg gacgacaaca gagagccggg 360
cgttttgggc cctcgcatcg tttgtcgccg ctgctaacgt tcgcatgccc atgcccgcga 420
gcgcgctctc gcgcgacaat aactgatg 448

<210> 4033

<211> 447

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-014-Q1-E1-E1

<400> 4033

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angaggcatg ggcacacgcg tgcggcggca ctgggaagca gacaatcctc atacccaagg 120
gcgacttctt tgtcggacaa ctcaacttca caggcccttg caagggcgac gtgaccatcc 180
aggtggatgg caatctgctg gcgaccacgg acctaagcca gtacaacgaa catggtaatt 240
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aaggcccagc cgtgtggagc aagaactcct gcaccaagaa gtacgactgc aagattcttc 360
ccaactcgct ggtgatggac ctcttgaac aacggggagg tgtccgggat cacgctgctc 420
aactccaagt tcttccacat gaacatg 447

<210> 4034

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-E12

<400> 4034

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tgggtgaggtg gctgcccgcg ccgccgccag cggacggcga gatacccttc ggacacgacg 120

ccgtcgcctt gtccttcttc gtggcgtgtg tggccgccac cgtcgcgctc gcgtcgtcca 180

tgtgctcggc atgcggtcgc aagccgaagg cggccacccg tgcagaccgc gccgcttcgg 240

accagtccac cgggacgggc tcgggctccg tctccggtgg cggcggaagc caggaggcta 300

gcgccgcgga agccgaagag gaagtgggtg gactgtcacc ggagctggcg atgcacggcg 360

ccatcgaccc ggtgacgctg ccgtcgtcga cgtcgaagcg gcgcctggtc atcagcgtga 420

gc 422

<210> 4035

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-E2

<400> 4035

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gcatgatgtg gacgctggta ccttgaagaa cgttgttctt tctgatggcg cagtcgtaac 180

agtgaagggg gctagagctg tgagcctccg gttgccgctt gaattaccac ttcctctcaa 240

ccgtaccact tacaagggtc gcctctcaag cctgatatcc atcgcacaa ccttgcgtgg 300

tgcagcccgg tctaatacaga aacccttgc ctctcttcgc gttgaggggc cagtttcctt 360

gtcctcgact ccttccatgt ctccaagga caagctcaag ctcaaacggt tggccccagg 420

cca 423

<210> 4036

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-E3

<400> 4036

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gcggtcctct tctacatcct cgcgcgtcgt gccctcagcg cggccgaggc accggcagag 180
tcaccgaagg caggcagtc tgcgaaggca ccggccgagt caccgaaggc aggcagtcct 240
gcagctcctg ccaaggcacc cgagtctgct gccacgagaa ctgccccgc taaggcacct 300
caagccgcct ccaacccgc cgttgccgct gcccacatcgt cgtcgtcgtc taggaagtct 360
ggtccagctg ccgcgccgac caccgccgcc tctacacgt cttcttcac ggacgaggag 420
ttgagccct 429

<210> 4037
<211> 436
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-014-Q1-E1-E7
<400> 4037

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gagttcgtgg acgcccacaa cgagctccgc gcgcgtacg gcgtgccgcc catgaagtgg 120
gacaaccagc tggcgcggca ggcgcggcgc tggccaacg ccatgcgcaa ggactgccag 180
atcctccaca gcggccacga gtacggcgag agcgtgttca ggagctacga cgactggaac 240
gccaccgcca gggaggccgt cttctggtgg ggcaaggagg aggccatcta cgacaaggag 300
aaggagaagt gcaagtacgg caaggtcttc aaggagtgcg gccacttcgc gtcattggtc 360
ggcaagagga gcaccaatgt cggctgcgca cgagccgagt gttcaaagg cggcgtcttc 420
atcacctgca actact 436

<210> 4038
<211> 438
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-014-Q1-E1-E8
<400> 4038

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gccgcggcgg ccgtgctgac cacggtgccc ggcgtcgcgc tcgccaagtc gaagctcgcc 120
aagaagagcg acgacgtcgt gaacgggccc ctctgaccg agaagatcca ggcgaagaag 180
acgtgatcgc tggggccgga cgaggagttc aagaccgtgc agtccgccat cgacgcggtg 240
cccgcggca acgccgagtg ggtcatcgtc cacctccgct ctggcctgca caggggcaaa 300
gttgtgatac cggagaacaa gcccttcac ttcgtgaggg gcaacggcaa aggccggacc 360
tccatctccc acgagtcgcg ctcttcgac aacgccgagt ccgccgcgtt caccgtgaac 420
tcgggcaacg tcacgtgc 438

<210> 4039
<211> 458
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-014-Q1-E1-E9
<400> 4039

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atagccgagg aattcgaagg accgaacgag aagctcctgc gtggtgtcaa cgtctaccct 120
accgtaccag ctagccacca cacgcgtagc gcgggaaatg ccggcggcgg cggccatgac 180
gacgaggcgg gtggtgctgg aggtgctacg gtcggcctcc cgcgacgcct tccaggtggc 240
cttctccttc gcggcgaggg cgcccgtgtc caccatgctc aagccggcca tcaccaagcc 300
cctctaccac caccaccacg acaacgacta atctggcgca gatctacagc acggccgtcg 360
gcatgccttc acagcccggg ggggtgtgac actattgatg acgtactacc acatttcgtc 420
gctcctattc tagtaagcaa cgcaaaagaa aatgttgt 458

<210> 4040
<211> 431
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-014-Q1-E1-F6
<400> 4040

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gatagagttg gcggccgggg gagtgagtcg tcagggatgg cgtcggagcc ggtggcgcg 120

gcggtggcgg aggaggtggg ccgctggggc agcatgaagc agacgggggt gaccctgcgg 180
 tacatgatgg agttcggtc ccgccccacc cagcgcaacc tgctcctctc cgcgagttc 240
 ctgcacaagg agctccccat ccgcttcgca cgccgcgcgc tcgagctcga ctcgctgccc 300
 ttcggcctct ccaacaagcc cgccatcctc aaggtgctgg actggtacat ggactcattc 360
 cgggacatca gatacttccc tgaagtggag agcaagaacg acgagctcgc ttccacgcag 420
 atgatcaaca t 431

<210> 4041
 <211> 384
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-014-Q1-E1-F7
 <400> 4041

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 cactctacat gtcctcgtgg tgtctcagcc tcttggtttt tacactctag agctcctagt 180
 accgccgatg taagatttgc tatctgcaat gtgctcatgc aaccagcgtg tgtgcgagtt 240
 aatagtttgc acgaaacccg ctatcaatct tccctagata ttttgttgta ccaatgaatg 300
 acatgtgggt ctatgataaa tgatgacacg atgatggttc acatcatgat acatatactc 360
 aggtcggccg ctctagatga ttca 384

<210> 4042
 <211> 436
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-014-Q1-E1-F8
 <400> 4042

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 tcgcacacct cgcccgcgcc accaccaccg ctccgttgcg cccgccagcc gtcacgcgtg 120
 acgtttcccg gggggccggg ggagagagag gcagaaggag gaggcacgga gaggacgaga 180
 caggatgctc gggttcaggc agatgccgtg gtcgtcggcg caggagcagg agcaggcgcc 240

gtcggagcag ctgtgcgagg ggggtgtcggc cgtcgtggcg gcgcgccagg ggatggagaa 300
gccgctgacg gctgtggcgg aggcgttcga ggagctggcg cgcggcatgg aggccgatgg 360
cggggagctc cgctcgcgc ccttcagcga ctctgcgct ctcgtctccg tgctcttcag 420
cagcctcggg gatggc 436

<210> 4043
<211> 306
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G1

<400> 4043

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gcatgaaggt gacgcccggg tccgcaccac cgcagatgcg caggaaaccg tagtgctccg 120
cgtggacaaa gccgccgggt taccacggtc atggggcatc aacatcgaga aatcggacgt 180
gtccgctata cacctgacgc tcaggccgtc ccacaaggcg atcatgttcg acacggccac 240
tactgggccg tcgctgacgc cgctgcccga tgtgaactgt cgctcgcgc tccgaaacaa 300
gcatgt 306

<210> 4044
<211> 456
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-014-Q1-E1-G11

<400> 4044

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ctaagcaggt ctgacaggat gtcgtggcag acatacgtcg atgagcacct catgtgagag 120
atcgagggcc accacctgac ctccgctgcc atagtcggcc acgacggcgc cgtttggggc 180
cagagcaccg cattcccaca gttcaagaca gaggagatga ccaacatcat gaaggacttc 240
gacgagcccc ggttcctggc cccgaccggc ctcttcctcg gccccacaa gtacatggtc 300
atccaaggcg agccccggcg tgtcatccgc gggaagaagg gatctggagg cataactgtg 360

aagaagacag ggcaagcgat ggtggtcggc atctacgacg agcccatgac ccccgccag 420
tgcaacatgg tggtcgagag gctcggcgac tacctc 456

<210> 4045
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G3

<400> 4045

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ttaggcgcct tcttcgtccc acgctccgtc tttatttgta atctgaagct tacaggaaca 120
tttgagtgga tcatggacgg attggtaggc ctcttgaaag tccgggtggt gaggggcatc 180
aaccttgctt accgcgacgc aagaggcagc gatccgtatg tcgtcctacg acttggcaag 240
aagaaactta agacgagcgt gaagaagaga tctgtgaacc ccatctggca cgaggagcta 300
actctgaccg tcacaaattc cagcctaact ctgaagctgg aggtgttcga caaggacacg 360
ttcagcaagg acgacccgat gggggacgcg gagatcgacg tggcgccgct ggtggaggcg 420
gcgaacgcga gcccg 435

<210> 4046
<211> 451
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G5

<400> 4046

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ctgcggcatc atggacgtcg agttcagaag ggtgccatgc aagtaccccg ccgggcagaa 180
gatcgtgttc cacatcgaga agggctgcaa cccaactac ctggccgtgc tggatgaagta 240
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gaagcccatg aagctctctt ggggcgcca cgggaagggt gacaacgcca aagcgctcaa 360
tggccccttc tccatccgcc tcaccagcga gtccggcaag aaggatcatc ccaaagacgt 420

catcccggcg aactggagac ccgatgccgt c

451

<210> 4047

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G6

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ctcctcgtct ccaactgcgtc cgctgcacgg accgtgggag acaccgtgca ggacgcgtgc 180

agcaagacac aattcccca gatctgcgtg gacagcctca ccgcaaagcc agagagccag 240

aaggcgaccc cgcgccgggt ggcggagctg ttcgtgaaca tcgcggccga gaaggatcc 300

gggatggcca cgttcgtgca cgggaagtac aacaacgcca aggacagcac cgtgttcaag 360

tgctacgaca gctgctc 377

<210> 4048

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-G9

<400> 4048

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cggggtcctg gtcaacaaga acgttgggat ctccgacaac ctgggccccg gcaaaccgct 180

aaggctactt aagggccttc cgctccccgt ttgcgccgcg ctggtcaagc aactggactc 240

cggcgaagac gacgaccaat taactatacc aagggggggt tcccggcatg ctgcacaaaa 300

ctacaacgat tcaaaacgaa cgcattggat gggtacaat ttctacggga agaaaaggga 360

gaaaaggga attaaaaatg tttcaaatg cctgattcc 399

<210> 4049

<211> 441

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-014-Q1-E1-H1

<400> 4049

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tacaaggacc caaatcctcc cccaagggca acaagtttct ggtccaaggg aaccacaatg 120

gccatgttct ctaacccaac cccatcaaca aaaattatgg cccaataaac atctgctgca 180

agtccggcgc ctcaaagtgt gccgtcaacg acgtcgtctt caagaacatc cacggcacct 240

ccaacacgcc ggatgccatc acgtcaact gcgccaacaa cctgccatgc cagggcgtgc 300

agtcgtcaa cgtcgacatc aagtacaatg gatccggcaa caagaccatg gccgtctgca 360

agaatgccat cggcaagtcc atcggttgg caaangagct ggctgcatt tgaaccaatt 420

gactaacatg catatattat g 441

<210> 4050

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-H11

<400> 4050

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actgctcatc gtccctcgcg ctgccgtcgc ggtcctggcc gcgcggccgg cgtctgcagg 120

cgggggagcc gcggcggtgg cggagatctg catgaagact ccgtcccccg acctgtgcac 180

caggacggcg gggaagcacg ccaacaagta caagtggtg gacgcggtga cggtgctaga 240

gatgcagggtg gacgcgttca agaagcgcgt gaaggcggcg cggaggctcg ccaaggagga 300

ggtcaagacg gccgcgacgc ccgaggcgcg gagggcgctg aacctctgca agacctacta 360

cctggacgcc gccgacaacc tcggcgctg caagcgcgcc atcggttcc gcgacgccgt 420

caccatccgc gccacgatga gca 443

<210> 4051

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-H5

<400> 4051

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cttggatcga attagacgac ttcttcgtcc ctctcttcat tagcacgcta acttgtaatc 120
tgcaggatct aagcagagac ttgatttagt tatggacgga ttggtaggcc tcttgaaagt 180
tcgcgtggtc cggggatatca accttgcta ccgcgacgca agaggcagcg atccgtatgt 240
cgtcctacgg cttggcaaga agaaactgaa gacaagcgtg aagaagagat ccgtgaaccc 300
catatggcaa gaggagctaa ctctgaccgt cacagattcc agccaaccac tgaaagctgg 360
tgagtgagca gcaagcagaa cgatcctgtt tgtgattcat tattctagac tgtttgctac 420
aggaagtgtt ccacaaggac accttcagc 449

<210> 4052

<211> 320

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-H6

<400> 4052

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cacatgatta agaagagccc gtcccaagat taccctgccg gacatggaac ccgacgagca 120
tccgccggaa ccggcgccac cgcaagacgg ggaaggagag gacaactagg aggaagggac 180
cgccaccaat atatatcaca cacacacaca cacactcaca cattctcaca ctcaagtctg 240
cgtttgccat ttttcttttc tttttctcta cgacttcgtt attcctcct ttcattatc 300
tctccgtgaa ctcggtttgt 320

<210> 4053

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-A5

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 gcggccgttt gctgcgaggg gccggcctcg ctgtcttcta gcaggaagca gcagcagcag 180
 cccgacgacg ccggctgcgg cagcagcagc agcgacgacc actaccagca cgacgtgatc 240
 atgctgaggg ggacgaggag cgggcgggca ttcccgccgc cgatctccgt gatcggcaag 300
 ggcgggcggc cgtggctctg cctgcggggc caccgcgagg gtggacgcct cgtgctgcgg 360
 cagatgcgcc tgccgtcgca ggagctgctg cagccctgca a 401

<210> 4054
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-A6

<400> 4054

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 acacgtacat tcacccggcg gcaataatgg cctcggttcc ggctccggcg acgacgaccg 120
 ccgccgtcat cctatgccta tgcgtcgtec tctcctgtgc cgccgctgac gacccgaacc 180
 tccccgacta cgtcatccag ggccgcgtgt actgcgacac ctgccgcgcc gggttcgtga 240
 ccaacgtcac cgagtacatc gcgggcgcca aggtgaggct ggagtgcaag cacttcggca 300
 ccggcaagct cgagcgcgcc atcgacgggg tcaccgacgc gaccggcacc tacacgatcg 360
 agtcaatga cagccacgag gaggacatct gccaggtggt gc 402

<210> 4055
 <211> 434
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-019-Q1-E1-A7

<400> 4055

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 ttgtgacatg ggctacaccg aggcttagtg aagacaaggt gaggcaatgc gtcgatccaa 180

ggctcggaga cgaataccct ccaaaggctg tagccaagat ggctgctgtg gccgccctct 240
 gcgtgcaata cgagggtgaa ttccgtccca acatgagcat cgtcgtcaag gctctgaacc 300
 ccttgctgca cagccggtct ggcaaccgcc ctactgctc gtcggcctcc cacgctgccg 360
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 aaaggaccgt cttg 434

<210> 4056
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-A8

<400> 4056

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 tcttcggcga caaccagggc taccgcgagc tgtcggagct cgccgagcag gcggccaagc 180
 gcgccgaggt ggccaggctc agggagctgc acacgtcaa gggacacgtc gagtccgtcg 240
 tcaagctcaa gggcctcgac attgacacca ttcagcagag ctacaccgtg taaactcgac 300
 tcagtttttt tatctgcttt tttttgcaga caaatacaaa ccacacacat atatatat 360
 gtaaagattc gttcgtat 398

<210> 4057
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-A9

<400> 4057

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 cagttatctc accaccgcct cctgtggaat actcttcacc acctaatacca gtcaactcac 180
 cggcaccacc tgtgaaaata tctcctccac taactccaat gggttcacca acgtctccca 240
 tgaaatcccc tccaccaacg ggagccgtca gtcgcccgc accgcctgta aaatcacctc 300

ctccaccggc tctgtgatt tcaccatcaa ctccggtgaa aatcctccca ccaccggcac 360
cagttagctc acctcccccg ccaattcccc ttagctcagc aacccccattt gcaaaaatccc 420
ca 422

<210> 4058
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-B10

<400> 4058

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cgagcacctg atgtgcgaga tcgagggcca ccacctcgcg gcggcggcca tcgtcggcca 180
cgacggtgcc gcctgggccc agagcacggc gttccccgag ttcaagaccg aggacatggc 240
caacatcatg aaggacttcg acgagccagg gcacctcgcg ccgacaggcc tggtcctcgg 300
acctaccaag tacatggtca tccaaggcga gcctggtgcc gtcacccgtg gcaagaaggg 360
atcaggaggc atcacctga agaaga 386

<210> 4059
<211> 398
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-019-Q1-E1-B4

<400> 4059

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caaggcgctg tgcccggcaa cctccgccc cgtggcggcg gcgagggccg atgacgcct 180
gcgccagcgc ccgcgggggc tcgtgcangt ccgggagcgg gatcagggcc cgctgtcgac 240
ggggcaccag cacctgcacc accatcacca ccagctcgcg cggtcggcgg cgttcccacc 300
ccgccgcccg gggccggggc gccgccctcc tcagcgtgc gaaagcgacc tcaacatcag 360
ggagcaccgc tctgcancc aggtggcccg cggcaccg 398

<210> 4060
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-B5

<400> 4060

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 catcgcttcg tgcagcctgc atcggtcgac gagggctgca cgaacgatgg ggtccgcctc 120
 cgctcagtg acgacaacca gcctgctggc gctggcgctg gcagcgctgg ctttcgtctc 180
 cagggccgcg gcgcagggca acggctgttc cagcgtgatg atgaccctgg ccccgatgat 240
 ggacttcata tccagcaagg cgtcggagcc ggggatctcc tgctgctcgg tgctggccgg 300
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 cggcacgcgc atcaaccaga ccagggcgct ggagctcccc ggcgtctgc 409

<210> 4061
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-B6

<400> 4061

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 tggcggatca ccagaggatc caccctgtag acctggaggg cggcaaccgg ccgacgacgc 180
 cgctggtgcc gggagcctcg ttccggtcgg acaagggcga cccagcgcag cgcgcgaaca 240
 accaccacca ccaacagcaa caacgaggt acgtctacgt ccccgggccg ctgcctccgc 300
 cgccgcgtca cgccgcgcca ccggcgccgc ctctgccgcc gccgaagcgg cgcaggcggc 360
 gctgctgctg ccggttcccc tgctgcg 387

<210> 4062
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-019-Q1-E1-B7

<400> 4062

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ggagtgttcc gtcgctttgt cagactactt ctggccttca ttgtcaaagt ctttgccttc 180
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ccagaactga tttctgacga tcatccggca gtagagactt tcaatgtaga ccacatcagt 300
cctgtcatag agcgccttca gagacttgaa gggaaggctcg atgagcttgg cagcaagcct 360
ccagcgattc ctgtggagaa agaacgatcc ctcttgaggt catgggatan gataaaatgc 420
atcgaatctg ac 432

<210> 4063
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-B8

<400> 4063

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aagcaaggga ggaaggggca gctcgcgac gacgccgaga tcttcgaggt gacaccggcc 120
tttcacgtcg tcgaggtgaa gaagtcggca ggcgacacgc tggagtatga gatgttctgc 180
agcaagggcc taagaccttc actcagcgac atctgctgga gcagccgac tgaggagaac 240
atggctcctt cagtgggttca gccatcacia ttggagccat cctcttagac cgtctccgac 300
agtttactca cccctcttag tcgattgtta tttaagtga gtctcttcgg agatgcaatt 360
acagtccatc ctctctttct 380

<210> 4064
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C1

<400> 4064

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cggccatggc ctcgattccg gcgacgacct tcgccgtcat cttatccgtc ctcttctgtg 180

ccgcggctgg caccgcccgtc gacaacgacc tccccgacta cgtcatccag ggccgcgtct 240

attgcgacac ctgccgcgcc gggttcgtga ccaatgtcac cgagtacatc gcgggcgcca 300

aggtgaggct ggagtgaag cacttcggca ccggcaagct cgagcgctcc atcgacgggg 360

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<210> 4065

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C10

<400> 4065

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gggcgccaag gtgaggctgg agtgcaagca cttcggcacc ggcaagctcg agcgctccat 120

cgacgggggtg accgacggga acggcacgta cacgatcgag ctcaaggaca gccacgagga 180

ggacatctgc gaggtggtct tgggtggagag cccgcgcaag gactgcgacc aggtgcaggc 240

ggacaggggac cgcgccggcg tcctgctcac caggaacgtc ggcatcagcg acaacctgcg 300

ccccgccaac ccgctcgggt acctcaagga cgtgccgctg cccatctgcg cctcgctgct 360

caaacagttg gactcggacg acgacgacga tcagtaatag cacatcgacg acgacgatcg 420

atat 424

<210> 4066

<211> 235

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C12

<400> 4066

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atttgatgca tgcattgcatg ggtataccta ccaatttgat gaccgacgat gtatagtttc 120
 gtcgactgct tcatacacat atatagcagc ccaattaatg taacgtcacg caaataagca 180
 tttgcggtaa ttttttgtct cggttgattcg atgaataaag ggcatgcttg agagt 235

<210> 4067
 <211> 393
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C2

<400> 4067

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 aaaaaacggg gaggtgtccg gggtcacgct gctcaactcc aagttcttcc acatgaacat 180
 gtaccggtgc aaggacatgc tgatcaagga cgtgaccgtg acggcgccccg gggacagccc 240
 caacacggat ggcatccaca tgggcgactc atccgggatc acgatcacca acaccgtcat 300
 tggcggtccgt gacgactgca tctccatcgg ccccgggacc tccaagggtga acatcaccgg 360
 cgtgacctgc ggccctggcc acggcatcag cat 393

<210> 4068
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C4

<400> 4068

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 aaggatggaa ccatctcggg tgcttctgca tttgctggtt atcaggaagc tgtgcaagac 120
 agggatcaca aattcttgac aaaagcagtg gaagaagcat atcgaggagt cgattgcbgt 180
 gacggaggtc cattcggagc agttgtcgtc tgtaatgacg aagtagtagt cagctgccat 240
 aacatgggtc tgaagcacac tgaccctact gcgcatgctg aagtaactgc aattagagag 300
 gcttgcaaaa agcttgggaa aattgagctc tcagactgcg aaatttacgc gtcctgcbag 360
 ccatgcccaa tgtgctttgg tgcagttcat ctctcccgaa tcaagaggct ggtttaaggg 420

ggcaaaa

426

<210> 4069

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C5

<400> 4069

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gacgtgccgc cacatccaca tggcggacga cgccgtcgcc ggcgagcgcg ccgttcgctg 120
cgcagggccg gcgcccgcct cgctgtcttc tagcaggaag cagcagcagc agccccgacga 180
cgccggctgc ggcagcagcg acgaccacta ccagcagcagc gtgatcatgc tgaggcggac 240
gaggagcggg cgggcgttcc cgccgccgat ctccgtgatc ggcaagggcg ggcggccgtg 300
gctctgcctg cggggcgacc gcgaggggtg acgcctcgctg ctgcggcaga tgcgcctgcc 360
gtcgcaggag ctgctgcagc cctgcaagga ggacggcagg ttcaagctcc tcatgcaccc 420
ggaggccccgc g 431

<210> 4070

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C6

<400> 4070

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ccgcgaccag cagcctgcag accatgtaca ggctcaacgt cggcggctct tacattgccc 120
cgaccaacga ctctgggctg tcgcgggact ggtacgacga cccccgtac ctctacggag 180
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aggcagagta cgcggcgcgg gccagcctct acctcagcag cagggtccatg ggccctaacc 300
caaaggtgaa ccagaactac aacctgacgt ggggtgttcga ggtggacagc aacttcacct 360
acgttgtccg cctccacttc tgcgagctgc tgcttacca 399

<210> 4071

<211> 51
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-C7

<400> 4071

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<210> 4072
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-D1

<400> 4072

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agtacaaggc cagcatggac gccaagacgc ggcaggcttt cgacggcgtg gtggccgccg 180
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acgtgtccct gtccaaggcg acgtcttccg gggacgagaa caactacgtg agcgtggccg 300
ccgcctacga gaaggccgcg ggcgcggtca tcgcggcgac gccggacaac aagctccgcg 360
ctatggcggtt cgcgttcgac ggcgcgggtg cgccggaccc gggc 404

<210> 4073
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-D2

<400> 4073

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gccatcggcg cggcgcagcg agccatcgcg ttcaaggaca cgggcaccgc gaagatcatg 120
ctgcagctcg ccgtccagga cttcgactcg tgtgaccgtc cgttcaccca tgccggtgtc 180
cccaacccca tgggtaagtt cgataaggag ctcagccaga tggccaacaa ctgcatggcg 240
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ctccagcgtg aggtggcggc ggcgcgcacg cagggaatgc ttggacatga ggagcacttg 360
gttttcattt aagaattcat tgaaattacg agtt 394

<210> 4074
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-D5

<400> 4074

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acgatttcca tacggacaca ttccgtgcaa ggtaccacac acacggtcga cgaaccgtgg 120
tggttgagga tggcgtgcaa tgggacaggg tgagggcacc gcctgttgac acccttgccg 180
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agtcattgta tggaagcgaa cacttttgtc ggtgccatct tagtgatacc gtggtgctgg 360
agtttaatca gtacacgccg ggctcaaggt ggaggcaagc gttggtgaaa cggaaggagc 420
at 422

<210> 4075
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-D6

<400> 4075

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gggtgcacgc cgctgccgcc cagcagcgg aggtgggacc ccgccgaccc gaacaccatc 180
ctccgggtgc tgtgccaccg cgacgacgag gccgccaacc agttcttgaa gcgcacgttc 240
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ccttacgcgt cccgcgcccc gcggcccgat tgatgaaatg atgtgcgtgg tgtttcgcat 360
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<210> 4076
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-D9

<400> 4076

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cctggcggtt cga 433
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<210> 4077
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E10

<400> 4077

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ggttgaactt aagaagggtc ctccaactcg tgccaagtca ccaaagctga cgcggaggaa 180
gagctgcagc gacaccctc acacaccaga gggaggaaac ggcggcgggc cagtgtgctg 240
ccggctgcac cgccacagcg tcgggaactc caaagacatc ggcggcaagg cacaatgctc 300
tccaaagact ggaccagctg ctaagtccag ggcgccccca aatccaggga agaccgagg 360
gcttccatga gaagaaagcg ggacagcagc caagcgccgc cgctgtacaa acctga 416
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<210> 4078
 <211> 428
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E11

<400> 4078

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gcaggggaac cgcgttcccc gacatctgca ccagcacggt ggggagcgaa gcgcagagcg 240

ccgggggtgtt ggacgccatg gcggtgttgc ggatgcaggt ggacgcgttc aacaagcgca 300

ccgaggcggc gagggcgcac gtcaaggagg ccgccgtgac ggcgcccccc aaggcgcgga 360

cggtgctgga cctgtgcaac aacctgtacc tggacgtgga ggacaacctg ggagcctgcc 420

gccgcgcc 428

<210> 4079

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E2

<400> 4079

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ctaataattt atcactatac ataaccaata tataagccat gggcaagcgc agcgtccctc 180

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<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E3

<400> 4080

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gccggcctcc tcccgcaggc gctgggtaag ggtaggggag gcaggggaca cggtggcgcc 180
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caggtggacg cgttcgccaa ggcacccgcg caggcgcgca agcacgtcgc gaggtcggcc 360
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<210> 4081

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E4

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gttggggtaa accttctggc gcgaggcacc atcgtcctag cggacaatgc tgaggtctcc 120
ggcaactttg cctccgttgc tgcacaatgc ctacagaaac tccccgcaa caacaatcgc 180
ttcaactaca attgtgatgg gcacacattc aactaccaca tttatgatgg attcacgtac 240
tgcgtcgttg ctaccgagtc agctggtcgc cagcttcag ttggatttat tgagagagtc 300
aaagaagatt tttccaagaa atatagcgga gggaaagcca aaaatgctag tgccaatggc 360
ctcaagcgag aatacgggcc taaactcaag gagcaca 397

<210> 4082

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E6

<400> 4082

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gtacaccaca accacggcaa gttcacggcc gggccgtgga aacccgcca cgcgaccttc 180
 tacggcgggc gggacgggtc cggcaccacg gcgggcgcgt gcgggtacaa ggacacgcgc 240
 gcgcaggggt atggcgtgca gacgggtggcc gtgagcacgg tgctgttcgg cgacggcgcg 300
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 gcggcggcgc tgggtggtgac ggcgaccgac ctgtgcccgc ccaacgaaca gcag 414

<210> 4083
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E7

<400> 4083

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 cagttccgaa gtttatgtca aaatgcaata tgttttcata aaaatggacc acggaggcga 180
 cactatttct gctcaciaaag aactgaaaga cctgaaggat gcaattattc cagaagggaa 240
 tggatcagga acagtgcctg aagtatttga tcctgaaaag catgtagatg cttacttgcc 300
 tgtccgggtg aatgagcaga gagtaagcaa tctgttcgag tcactgttga ttgctggtg 360
 tattggagtt acaccgctca ttcagaagat accaacaatca gtcctctggg gtt 413

<210> 4084
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E8

<400> 4084

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 tggttcggag ggcttttcag cggctcaggc aaaaggcgac aagtcagtgc agagaagata 180
 gtgcttgatc taaccctgt acaggaacag agactgcaaa gtctgaagga aaggctaaat 240
 gtaccttacg acgaaactcg gacggatcat caagattcgc ttagggctct atggaatgcc 300

tcctttcccg atacagagct cactatctta gtttcggaac agtggaaaga catgggggtgg 360
cagggcgta acccagcaac tgatttcagg ggctgtggat ttgtttcgct tgaaaaccct 420
t 421

<210> 4085
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-E9

<400> 4085

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ggttccccgt gtgggaggcc gcgctcggcg ccggaatcgc cgccgccttc gccgctggac 180
tcgtcgggtg ctacctttcc atgccggact ccgactacag cttcctcaag ttgccacgta 240
atctcgagga actccaaatc ctcactggcc accttgagaa ctatactagt gactacaccc 300
tacaggtgtt ggtaggttat tgcgctgtgt acatcttcat gcagaccttc atgatcccag 360
ggacaatatt catgtcactg cttgctggtg ctctgtttgg gcaactgc 408

<210> 4086
<211> 344
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-F1

<400> 4086

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tatccaccac cgcgcgcgtc cggtttaatt tctcctcgac cggccagcgc aattctgtgg 120
ctcgatagat cggtcggtca taaggcaagg tgagcaagct agagatatat ataggagatt 180
cttcgagcga actactagcg agatgggttc cgccgtcctc ttttactgca tctgcatcac 240
cgtcgtcgtc gcattgtcgt cgtccatggc cgccgtcggg gacgccgccc cgggggaaac 300
ccccaagttc atcccggcga gcgcccttga gtgctccgct aacg 344

<210> 4087

<211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-019-Q1-E1-F11

 <400> 4087

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 cgagcacctg atgtgcgaga tcgagggcca ccacctcgcg gcggcgcca tcgtcggcca 180
 cgacggtgcc gcctgggcgc agagcacggc gttccccgag ttcaagaccg aggacatggc 240
 caacatcatg aaggacttcg acgagccagg gcacctcgcg ccgacaggcc tgttcctcgg 300
 acctaccaag tacatggtca tccaaggcga gcctggtgcc gtcatccgtg gcaagaaggg 360
 atcaggacgc atcacctga agaagacagg gc 392

<210> 4088
 <211> 76
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-019-Q1-E1-F12

 <400> 4088

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 caaaattcaa ttcaag 76

<210> 4089
 <211> 407
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-019-Q1-E1-F5

 <400> 4089

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 ggccttcggc tccctggcaa agcccgggct caacgacaag attcgccact gcggcatcat 120
 ggacgtcgag ttcagaaggg tgcgatgcaa gtaccccgcc gggcagaaga tcgtgttcca 180
 catcgagaag ggctgcaacc ccaactacct ggccgtgctg gtgaagtatg tggcggacga 240

cggcgacatc gtgctgatgg aaatccagga caagttgtcg gctgagtgga agcccatgaa 300
gctctcttgg ggcgccatct ggaggatgga cactgccaaag gcgctcaagg gccccttctc 360
catccgcctc accagcgagt ccggcaagaa ggtcatcgcc aaagacg 407

<210> 4090

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-F6

<400> 4090

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tgcgcatca tggacgtcga gttcagaagg gtgcgatgca agtaccctcg cgggcagaag 180
atcgtgttcc acatcgagaa gggctgcaac cccaactacc tggccgtgct ggtgaagtat 240
gtggcggacg acggcgacat cgtgctgatg ggaatccagg acaagttgtc ggctgactgg 300
aagcccatgg agctcccttg ggcgccatc tggaggatgg aactgccaa ggcgctcacg 360
ggccccttcg tccatccgcc tcaccagcga atccggcaag 400

<210> 4091

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-F7

<400> 4091

caggtcaacg actcgcgggt cgaccacgc gtccagtgga attcgacgac gaaactccgt 60
cacgtcattc ctctgcgcct cccgtctggc cgtcttcag acgtctccaa tcggagctcc 120
cagcgtctcg gagaagagga gcagcacggc acggcggctg tggcgaggaa ggctcctgtc 180
ctgtcccatc ccaatccagc agccgtccaa ggaggaggag atccaatcgg cgtgcaggcg 240
tccaccgtcc atccatcgat ccaattccaa tctgcaggcc tctgcgtcgc ggcttggttcg 300
tggaggagag gttgctgtgg aaccgcgcgc cagttagcca tgtcgtcctc cgtgctgagg 360
gctgcggccg acagggtat tcgcaagcag gccctcacgc tgaccgacgc cgcggcgctcc 420

aggattcggc agctcctc

438

<210> 4092
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-F8

<400> 4092

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ggcttccggt gccccgcccc caaccacaaa gacagcgtga tgtacgtgtg ctgctcaag 120
gaccgcaagt tcaaggcgaa gaaggctaac agcacgcggt accagacacg gcggaagcg 180
gacctgacgt tcgcctacga cgtgctgcag gccaacacca acaactacca ggtgcaggtg 240
accatcgaca actggagccc catcagccgg ctggacaact ggaacctcac ctgggagtgg 300
aagcgcggcg agttcatcta cagcatgaag ggcgcctaca cgctgctcaa ggaaggcccc 360
gcctgcatct acagccccgc agcggggtac tacaaggaca tggaactcaa ccccg 415

<210> 4093
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G10

<400> 4093

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ttctcctttt cttgccacgg caaaacacct tcgccggcga gagcatggcg atggcgtacc 120
gtgtcctgga ggtcaccctg gtgtcggcaa atgacctcaa gaaagtgtcg ctcttctccc 180
ggactcgcat ctacgccgtg gcttccatct ccggattcga cctccgcac ccttcccaca 240
gcacccaagc agaccacagc aacggctgca acccctgctg gaacgccgtg gtacacttcc 300
ccatcccggc tgccgctgac acccgcggcc tcgactcca cgtgaggctc cgcgcccagc 360
gtctatacct gggcgatcgc gacatctgcg aagtgtttgt gccc 404

<210> 4094
<211> 349
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G12

<400> 4094

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gagcaagaaa tagtgccagc attcatacaa ttgcaagatc ctcccgaata gcttgggtgct 120

ggattttgtg acgaacgtcc agatccgcgg catcacggct gctcaacagc aagttcttcc 180

acctcaacat cgtcgagtgc aagaacgtgc tgatcgacaa agtgaccgtc aaggcccccg 240

gggatagacc caacacggac gggatccaca tcgggcgctc cagcaacgtg accatgagca 300

gcaccaccat ccggcggtccg agaagaatgc atctccatcg ggcgcgggg 349

<210> 4095

<211> 248

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G3

<400> 4095

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tacactgtag caagggactg gtttagtctt ctgtactttg gttattatgt tggaattgca 120

acgattacag taaatgagaa tgacatcacc tgggtgcctac gacataagac atgttgattt 180

attcacaacc aacagcggca gaaaaggcat caggaaacat cccaatcttc aaagacggaa 240

acggctac 248

<210> 4096

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G5

<400> 4096

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tgcagcgctc gtcgccggcg ggtcatgcgg gccccgaag gtgccgcccgt gtcccaacat 120

caccaccaac tacaacggca agtgggtcac cgccagggcc acctggtacg gtcagcccaa 180

cggtgccggc gctcctgaca acggcgggtgc gtgcgggatc aagaacgtga acctgccacc 240
 ctacagcggc atgacggcgt gcggaacgt ccccatcttc aaggacggca agggctgcgg 300
 ctcattgctac gaggtgagat gcaaggaaaa acctgagtgc tcgggcaatc cagtcacggc 360
 gtacatcact gacatgaact acgagcctat cgctccctaa c 401

<210> 4097

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G6

<400> 4097

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 acgactaata agccccctct cctcctcgcc ctggcgctcg cgctccttgg tgcggcgccg 120
 gccgccgcga acgcgccccg cggggcggttc agcaactggg tggcgatgaa ccagcagagc 180
 tacgcgctgt acgcgcagaa gtccgtcggg gacgggggca aggagcccct ggacaagaag 240
 ctgtcggagg cggagaagaa gaaggtcacg tacgtggtgg accccagcgg caagggcgac 300
 cacaccaaca tcaccgcggc gctggaggat atcccgtga gcaacaccaa gcgcgtgatc 360
 ctggatctca agccccggcg tcagttccgc gagaagctgt tcct 404

<210> 4098

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G7

<400> 4098

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 aaatgtcgcg cgtcacagct gcggtgctct ttacatcct cgccgttgct gccctcagcg 120
 cggccgaggg cccggcagag tcaccgaagg aaggcagtgc tgccaaggca cctgaggctg 180
 ccaagagaac tgctgcccc gctgaagcac ccggagccgc gtccaccccc gtcgccgccc 240
 ctgccccatc atcgtcgtct aggaagtctg gtccagctac cgcgccagcc accgcctcta 300
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cgccccctgc ggctgagggga cgggctgctg atgactccgc cggtg

405

<210> 4099

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G8

<400> 4099

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cggcaactcc tctacaccg agccctgcac ctacatcaac tccctcgcca tcggcccgtc 120

cgccgcgctc gccgtccgag gcggtgcagct cgtcgccacg cagtgatcta tccccatgcg 180

tgcgtgtgtg tcccgtgtt tcgtttcttc cctgacatga tatgatttct actcggttac 240

tgatgattca ttgattccgg cggccccgcg attgttcatt atattagggtg acgtctgcgg 300

gcgcgtgcgg ggatccatcc aaatctctca ctgctattg tttctgtacg tacgtacgtg 360

tacgtccaag attataatga tactcataat aatctcgtcg c 401

<210> 4100

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-G9

<400> 4100

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gggccgaccg caccacggcg gcggcggtac ccagtacggc cacgagacac gcccgcacca 180

cggcggcggg ggcggcgccc cgctgtgag gcagcagacg tacaggatct actgcaaggc 240

tggggaggac cagtacagcc tcgctcccg cgacggcaag gtctgcctcg tgcgcacgga 300

ccgtgatgac gacgcgcagc actggatcaa ggacatgaag tacagcacca gggatgaagga 360

tgaggaaggc taccctgccg tcgtcctcgt caacaaagcc actggag 407

<210> 4101

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H11

<400> 4101

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tgtgggtgct gcggcgatct ggtcgaggac gaggagaggc gtgagcacct agaggccgcc 120

tgtgaccttg caaccacta cctctgccac ccctgcgccc tctgccagga gggtcgcgag 180

ctgcgccgca gggttcccca ccctggattc aacaatgggc actccgtctt tgtcatgatg 240

ccgcccattg agcagaccat ggggcgtggc atgtgagcta ttccaccacc ttccctgccc 300

tagttttatc tgtgtttccc gtggtttatc atctgctgct gttggccttg atgtgtgatg 360

tgtcctttgt tcgtcagtaa at 382

<210> 4102

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H4

<400> 4102

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agcggcgatg gcggagatcc cggtgatcga cctgcgcctc gccggctcgt cgcccagcga 120

gtcggcgcggtg ctgcgcgacg cgtgcgagcg cctgggctgc tttcgggtga ccggccacgg 180

cgcgcccgcg gggctcctgg ccgacatgaa ggccgcccgtg cgcgcgctct tcgacctccc 240

cgacgacgcc aagcgcgcga acgcccagct catccccggc agcggctacg tcgcgccttg 300

ccccgccaac ccgctccacg aggccttcgg gtcctcgcac gccgccgcgc gcggcgacgt 360

cgacgccttc tcgcgcgcgc tcga 384

<210> 4103

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H5

<400> 4103

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agtcctatca ggatctcatg aacaccgtct aagctctgcc ttagatggac actacgacga 120
gaagaggaaa tccaatgtgg aatacacaga ggacgagaag aaagccgtga tcgcggctct 180
gaaaaagaag gctttgagcg cctcacagaa gtttaggcat tccatgaaga gggggaggaa 240
gagcagcaag gtgatgtcca tctcgattct ggatgagcgt gaacctgagg aggtgcaggc 300
tgtggatgcc ttccgccagc ttcttgact tgaagagctg ctaccatcgc agcatgatga 360
ctaccacatg atgctaagat ttctcaaggg aagaaagt 398

<210> 4104

<211> 420

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-019-Q1-E1-H6

<400> 4104

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ccggatacat cgaggggtgag aagcaagatg ctgtacgcga gctccaagga ccggttcaag 120
agggagctgg atggcattca ggtggagcta caagcaaccg acccgagcga aatgagcatg 180
gacatcgtca agtcgcgagc cctctgaaac agccccggcc gctgcacctg cacgctgcag 240
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gtcttgtgtt ttcgtgtcct tgttttctcg gaagcanaag ccctgcattc tgtatgagac 360
tgtatgccat tttcaatctt tttctctccc catatctctg ccctagtccc gctacggctg 420

<210> 4105

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-F12

<400> 4105

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gagcgacgac gtcgtgaacg ggcccctcct gaccgagaag atccaggcga agaagacgct 180

gatcgtgggg ccggacgagg agttcaagac cgtgcagtcc gccatcgacg cggtgcccgc 240
 cggcaacgcc gagggggtca tcgtccacct ccgctctggc ctgcacaggg gcaaagttgt 300
 gataccggag aacaagccct tcattcttctg gaggggcaac ggcaaaggcc ggacctccat 360
 ctcccacgag tccgcctctt ccgacaacgc cgagtccgcc gcgttcaccg tgaactcgga 420
 caacgtcatc gtc 433

<210> 4106
 <211> 178
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-F2

<400> 4106

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 acagagcgaa cgcatggcat ggatagcagt atctaccgaa agaaaacgaa gaaaaggaaa 120
 ataaaaaatg tatcagagtg cttgattcaa aaaaaaaaaa aaaaaaaca aaaacaac 178

<210> 4107
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-F3

<400> 4107

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 ggggggatggg catcgctctg gcagactccg accacaacgg catcgggagc ttcgctggta 120
 accgtgtgga tcaactacgtc agatgcgcca tgacaaatgc cttcgctaag gcattgggta 180
 acgggctcag acaggggaac aacatggaca tccaacgcaa cgacaacacc agcgagatca 240
 tggcagggat cgccaaggac actgagcacc tggctcagtt cgagctggag atgttcagcc 300
 cgggtgctgaa gctgtggcac ccgttcccgg gcgcgtccgt ggtgagcacg ctccacatct 360
 gctacagcgt cttgctgaag cagtacatgt ccaaggcgac gtacctcatg aacgagctcg 420
 tgcacgtgct gaa 433

<210> 4108
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-007-Q1-E1-F4

 <400> 4108

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 gaccgcccgt ccacgagcca gggactttcg gccatggggg acggtgggtgc tgacgacgcc 120
 tcctcgccgc cgccgatga cgggggcttc tcctacctcg ccgtcttcca caactacccc 180
 ctgctcgccg ccctgctcgg cttcgccgtc gcgcagtcca tcaagttctt cctcacatgg 240
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 cattctgcca cggttacagc actagcagta gcgattgggt tgcaagatgg ctttaactgc 360
 tccctctttg caacagcaac tatatttgca agtgtggtaa tgtacgatgc ttctggtatc 420
 agattgcatg ctggaaag 438

<210> 4109
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-007-Q1-E1-F5

 <400> 4109

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 tgcaggactc caagaacacg acggacaaga ctatgggtgcc gccaccgtg taccaccgc 180
 cgcaggccat ggcgtccgca taccgcccgc aacaatattg ttcgccgtac gcggcggtacc 240
 cgcggcagcc ttacgggtac cctgctccgc caccgtacgg gtacaatgct gcttccccac 300
 aaccggcgat gtacaactac gcagcacagc cggtagctgc accggcgagg catggcggag 360
 gtatggggat ggg 373

<210> 4110
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-F6

<400> 4110

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cgccatggac tgcaaggccg ggtgtgacga ggtcacgggc ccaactccaca tgagcatgga 180
ggactgcatg aagagggtgca aggagatcgc tgctaagcag gggcctaggg acccttataa 240
ggataacaaa cttgacatcc catgaactag ttaatgctcc tatatcatct gcctatccat 300
gcatgcattg cattgcgtat gcacactgtg cgtgcctgcc caciaagttc gacaacacac 360
cgatctcgat ggatttgtaa tcgtgtccac tcgatcgaga gatcgatcga tgcttgttat 420
tatatttcta ttccacatta tata 444

<210> 4111

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-F7

<400> 4111

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caccatggat cgtcgatcgt tcagcagcac aagagacgac aatggagacg acagctcctc 120
gggtccggtc cgatcgattc ttgcttacgt gtacatagct gaggcgcagg cgcagcacct 180
acttaccat taacgtcatt gccagtgaga gtttcatcat aattttattt ttattaaaca 240
agatgatata tcacgatatt tgatgacatg acacgggtatt ataataaaaa aaacacaaaa 300
ctaaaaaatc tcaaacaaat aggaaaacac actaaaagaa tcatacatatc ataacacgag 360
aaaaggaaat aaatgaaccg gtcaaaggcg ccaagtcaat tcaattcaag gggacgacac 420
aaaaaagggg gggccccc 438

<210> 4112

<211> 336

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-G1

<400> 4112

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cgcgaaacgcg cccggcgggg cgttcagcaa ctgggtggcg atgaaccagc agagctacgc 120

gctgtacgcg cagaagtccg tcggggacgg gggcaaggag cccctggaca agaagctgtc 180

ggaggcggag aagaagaagg tcacgtacgt ggtggacccc agcggcaagg gcgactacac 240

caacatcacc gcggcgctgg aggatatccc ggtgagcaac accaagcgcg tgatcctgga 300

tctcaagccc ggcgctcagt tccgcgagaa gctgtt 336

<210> 4113

<211> 228

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-G10

<400> 4113

attccagggtc gacccacgcg tccaaccagc ccacgacgca cgcctctcct gatccatctg 60

atacgtccag gatgacgttc acccctgtcg taacagttcc cacacggatc gaccacgatc 120

actttcgcaa cacgcgacga aagggaaggg tggatcgaac ttgcatccaa catcgatccc 180

aaatggtgct tcgcacgtac atgccatata aatacctata ttcgaccg 228

<210> 4114

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-G3

<400> 4114

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gatcttaatt acaggtcata gctaagcagg tctgacagga tgctgtggca gacatacgtc 120

gatgagcacc tcatgtgcga gatcgagggc caccacctga cctccgctgc catagtcggc 180

cacgacggcg ccgtttgggc ccagagcacc gcattcccac agttcaagac agaggagatg 240

accaacatca tgaaggactt cgacgagccc gggttcctgg ccccgaccgg cctcttctc 300

ggccccacca agtacatggt catccaaggc gagcccggcg ctgtcatccg cgggaagaag 360

ggatctggag gcataactgt gaagaagaca gggcaagcga tggtaggtcgg catctacgac 420
gagcccatga cccccggcca gtgcaacatg 450

<210> 4115
<211> 356
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-G5

<400> 4115

agtaacgggc cagaattccc gggccgaccc acgcgtccac tcaaagttga agcatgtggc 60
aggtcttgat gcgctgcagc acctcagact tgtctttcct ccgtccaccg agacatttta 120
tttcgaagag ctaataatth tccggagcgt tgccttccca cggtaggttg aaccacagga 180
tcaaaagtgc aaaaggccgc gacaggttga attgcaatgt ggtctgtcac agtgcacagg 240
acctgcctca agggtagaaa aatgtgaaat ctctgtcagc atatccccga ggtgcgcac 300
ataatctgca agggaaagag atactttcgg taaaacaaga cccgcggaac caacaa 356

<210> 4116
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-G7

<400> 4116

ggtccagggt tcccgggccc acccagcgt ccgagatcat catctccatc caccgcccgc 60
cgtagctagc tagatctgct gccatggctt cctttggcga ggctcccggc ggtgacgccg 120
gcagcggcga gaagatcttc cgcaccaagt gcgcgcagtg ccataccgtg gagcgagggtg 180
gcgcgcacag gcagggaccc aacctgcagc gcctcttcgg tcgtcagtca aggaacaacc 240
tcgggtaagc ctaatccaag ggcaacaaga acatgggcgt cctccgggaa gagggcacac 300
tgtgtgaata actctcaca cccaagaagt atattccaag cgcacaaaga tggctcttccc 360
ggggctcaag aagcctaagg agcgaaccga tctcatcgcc tacctcaagg aatccacggc 420
ttaacttctt ctagctatct ta 442

<210> 4117
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-007-Q1-E1-G8

 <400> 4117

 gacccaagcg tcaagttctc tcttccttgt ccaagtgatc ttgccaagtt acgagcagca 60
 agcagagatc agatcatcca tcggcaatgt cgaacatcgg gcagtccttc caggccggca 120
 aggctgaggg ccagggcgag taccaggcgg agcacgcggc gcagtgcgtc aaggacaccg 180
 ccgcagccgc ggccgacagt ggcagctgc agcagcaccg cccaccggc accgttgagc 240
 aggtggcgca gacggggccag ggcgtggcgg caggcgtcaa ggacacggtg gcggggcgcg 300
 cggttggcgt cacgaacacg gtggcgggcg tggcggcggg cgtcacgaac acggtcacgg 360
 gcgcccgtgg cgggcgtcac gaacacggtg accggcgcgg cggccggtgt caaggacacc 420
 gtgaccggcg gccactgatc g 441

<210> 4118
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-007-Q1-E1-G9

 <400> 4118

 attccaaggc cgacccacgc gtccacacag attactttct gttgcttcta gttcacagat 60
 tctctatggt ggtgatcaca tatacggaga tattctgcgg agcaagaaag ttctaggctg 120
 gcggactatg ctggtgattc cagaactaga acaagagctg aagcttctct cagaatcaaa 180
 gtctactcgt aaggagctta gacatcttag aatggagcgt gattcaattg aagacaaaat 240
 ccatcatctt gaatggtctc ttaagcttga tgatatctca gaaaaccaga aggagaaatt 300
 gttctctgaa catgacaatc tgctgaaaca gagaggcat gttcgtggtc ttcacaaaga 360
 agctcagaag caacatcatc agaagtttca taaggtgtgg ggacagctca tgaagact 418

<210> 4119
 <211> 424
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-007-Q1-E1-H1

<400> 4119

tagccgtcca gcattctagg gtcgaccac gcgtccagat cacaatcgag aaactggtca 60
 agcacccttg gttcaaaaag ggggtacaggc cggccgtcat cctggcacac ccgcacggct 120
 caagcacctt caaggatgtc aaggctgcct tcagcaacgc cgaccacaag gacagcatca 180
 gcaaagtgga acagccggcg gacagctcct tgaagccggc gacctgaac gcgttcgaca 240
 tcatctccca ctccagaggg ttcgacctgt caagcctgtt cgangtggac caagagcaga 300
 aggccagcaa ctgcgggttc atgaccaga agccggcgtc ggcgatagtg tcaaagctgg 360
 agcagatcgc tgagacagag cgcttcatgg tgaaaaaaca agacgggctg gtgaagctgc 420
 aggg 424

<210> 4120
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-H12

<400> 4120

gggccgacac acgcgtccag cgccatgagc tccccgtggt gcgcgcggcg tcgtgctcgt 60
 cgtggccgcc gacgtcgcca acgccggcca cgccaagccc ctgacgcctg gcgggcgcgt 120
 ggtacaccac aaccacggca agttcacggc cgggccgtgg aaaccgcgcc acgcgacctt 180
 ctacggcggg cgggacgggt ccggcaccac ggcgggcgcg tgcgggtaca aggacacgcg 240
 cgcgcagggg tatggcgtgc agacggtggc cgtgagcacg gtgctgttcg gtgacggcgc 300
 ggctgcggc ggggtgctac aggtgcgctg cgtggacagc cctagcgggt gcaagcccag 360
 cgcggcgaca ctggtggtga cggcgaccga cctgtgcccg cccaacgacc aacagtccgc 420
 ggacagccgc ggggtggtgca acc 443

<210> 4121
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-H3

<400> 4121

.aactcaaggg tcgacacacg cgtctagtct tcgtctcact caccctgcct tcacgcctcc 60
ctcaccaaat aaggtcccg ccttttccga cattcacacg ggggacagga aatcagcggc 120
catggcctcg attccggcga cgaccttcgc cgtcatctta tccgtcctct tctgtgccgc 180
ggctggcacc gccgtcgaca acgacctccc cgactacgtc atccagggcc gcgtccattg 240
cgacacctgc cgcgccgggt tcgtgaccaa tgtcaccgag tacatcgcg ggcgcaacgt 300
gaggctggag tgcaagcact tcggcaccgg caagctcgag cgctccatcg acgggggtgac 360
cgacgggaac ggcacgtaca cgatcgagct caaggacagc cacgatgacg acatctgcga 420
cgtggt 426

<210> 4122

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-H5

<400> 4122

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aaggacgtgc cgctgcccatt ctgcgcctcg ctgctcaaac agttggactc ggacgacgac 120
gacgatcagt aatagcacat cgacgacgac gatcgatatg taatagcacg tcgtcgacga 180
ccgaccgcag tcgtcgcaga ctggctggca ctaaaccaca aatcctcttc acctggatta 240
caaatatgta actgagaaag gaaaggaaaa caaaaatgta actgcgtggc tgtacaaaaa 300
aaaaaaaaa aaaaaaaaaa aagaaaaaaa aaaaacagga acaaataaaa agaaaaaaaa 360
aactacaggg agaaaaaata aaaaaaaaaa ggggcggccg 400

<210> 4123

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-007-Q1-E1-H6

<400> 4123

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 cacgaaggct gtgcaggagg catgggcatc agcgtgcggc ggcaactggga agcagacaat 120
 cctcatatccc aagggcgact tccttgctcg acaactcaac ttcacaggcc cttgcaaggg 180
 cgacgtgacc atccaggtgg atggcaatct gctggcgacc acggacctaa gccagtacaa 240
 ggaacatggt aattggatcg agattctacg cgtggataac ctgggtcatca ccggcaaggg 300
 aaaccttgac gggcagggcc cagccgtgtg gagcaagaac tcctgcacca agaagtacga 360
 ctgcaagatc cttcccaact cgctggtgat ggacttcgtg aacaacgggg acgtgtccgg 420
 gatcacgctg ctcaact 437

<210> 4124
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-007-Q1-E1-H7
 <400> 4124

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 catcttccag cgcatagaaga actacaccat ctacgccgtg tccatcacca tccgcatcgt 120
 gctgggcttc ctgctcgctg cgctggtctg gaagtctgac ttcgcgcctt tcatggtgct 180
 catcattgcc atcctcaacg acggcaccat catgaccatc tccaaggacc gcgtaagcc 240
 gtcgccgacg cccgactcgt ggaagctcaa ggagatcttc gccacgggca tcgtgctagg 300
 gacctacatg gcgctcgcca cggcgctctt cttctacctg gcgcacgaca ccgacttctt 360
 caccaacgcc ttcggcgctgc ggtccatcaa ggagaacgac aaggagctga tggcggcgct 420
 gtacctgcaa g 431

<210> 4125
 <211> 94
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-008-Q1-E1-A1
 <400> 4125

ccacgcgtcc gagtacgtca ccgttcccaa gaacatggcc aacatcttca tgtacggcga 60

<210> 4126
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-A11

<400> 4126

ttcccgggcc gacacacgcg tccaagcacc tcctcttccc ccgccgggca acaactcagc 60
cgccgcaacc gccacatcag ccatggggcg ctgcgcaacc aagccaaga cgcttgaggg 120
gcaggcccca gctgaggccg ccgtctccac acccaaggtt gcgcccagg ccactccaat 180
ctccgttgag gttgcggtg atgaacaggt agctgagaag gtggtggtgg aggagccggc 240
tgcgggcgcc gacgttgagc atcagaaggc taatgaggtg ctgctccag aggcggccgt 300
cgccgagccc gaccacaagg aggaggaagc cgtggagaag accgtcgtcg aggaggagaa 360
gccagcggca gcagcccatg cagaggaaaa ggtcgccacc gccgccgaga ccacgacgac 420
ggtggaggcg aagaagaacg ccgagga 447

<210> 4127
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-A6

<400> 4127

ccacgcgtcc gatcgtcgga gcagagagag acttcctcgc ctccatcca tcccgccgcc 60
gccgtctcta cggtcgctaa taagccgccg catccagga tggagatgaa gaagatcgcc 120
tgcgccgtcc tcgtcgccgc ctcgccacc gtggcgctgg ccgcggaggc gccggctccg 180
tccccacca gcggctcctc cgcggtcgca cccgccatcg tcggggccgc cgtggcctcc 240
ttcttcgcgt actacattca ctgagccgcc ggacgaggag ccggactgcc ggagggaaga 300
gaccaagggg gggagagact tggctgcgct gcgctgctct gctgctcccg cgcattcccg 360
atgcgtgggt ggggtgtgctc tgattgggca cggcagtggc acaccttcgt cttccttttg 420
tttgtttttt tc 432

<210> 4128
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-A7

 <400> 4128

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 tcgagaaggg ctgcaacccc aactacctgg ccgtgctggt gaagtatgtg gcggacgacg 120
 gcgacatcgt gctgatggaa atccaggaca agttgtcggc tgagtggaag cccatgaagc 180
 tctcttgggg cgccatctgg aggatggaca ctgccaaaggc gctcaagggc cccttctcca 240
 tccgcctcac cagcgagtcc ggcaagaagg tcatcgccaa agacgtcatc ccgccgaact 300
 ggagacccga tgccgtctac acttccaacg tccaattcta ctagactttg aattcccttc 360
 gattcatccg gcgcggtggg ctatggacct gcagcagcaa gctaattaag tttatatata 420
 ttgcatgaga gagcatgcac 440

<210> 4129
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-A8

 <400> 4129

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 tctgcttggt aaaaccagtc ccagcttaca ccaaggctctt gctttcactt gaaggcgtga 120
 taccaagatc cctactgctc aaagaatgtg cacagaacat ggtgtaaaac taaaagcaaa 180
 caaaccaaca ttttttgggt tacttatctc atctcaacct ggatctccat ctctctgtct 240
 cccgaggctt tacaagctgt acaggcgcag ccgggatccg gagccaccac tcccgcaatc 300
 tcctcaccag cttctcactg ctcttcttcc tcaccggcat ctgtcttggt tattcttcta 360
 gaaggattag tagaacgatg gtcctcaagg gcacgaacgt gaatatcgca gccacagcaa 420
 ccagtgcagc tgc 433

<210> 4130

<211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-A9

 <400> 4130

 cccgggcca cccacgcgtc cagtacattc tctctctcct ctctcggcct tcttcgcgtg 60
 tttccctctt tttcttaggc cgcctcttac acttctcgac ataaccatcg agagggcggt 120
 cgagagaaac gagagcgga gacaccatgg ggagctcgag gaccatcggt gcgtcccccc 180
 tgctctcct cgcctctcct ctcttggtt tcgcggccac cgcgaggcc cgcgttggtcc 240
 ccgagctggt tggcgaggac caattccagc ggacatgcaa ccaggtgcac ttcaggaaga 300
 tgtgccagag cttgacgagg ctcccgagg tgacaacgcc gcgcgaactg ctgctagcgt 360
 cgatgcgcgt cgcggcggt aaggccagg aggccaagag ccgggtggac gagttcgcgg 420
 cgaggaacca cgagggccgg ccga 444

<210> 4131
 <211> 162
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-B1

 <400> 4131

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 acatcatggt cgtggggccc gtccttgagg cgcttgctgt cggcgggtcc tgcgggcccc 120
 ccaatgtgcc gcccggcccc aacatcacca cgaactataa cg 162

<210> 4132
 <211> 453
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-B10

 <400> 4132

 ggtctagaat tcccgggccg acccagcgt ccaataacac aggtgagcgc gacgatggga 60
 tccctcgta ataacatcat ggtcgtgggc gccgtccttg cggcgctcgt cgcggcgagg 120

tcgtgcgggc ccccgagggt gccacccggc cccaacatca ccaccaacta caacggcaag 180
 tggctcaccg ctagggccac ctggtacggt cagcccaacg gtgccggcgc tcctgacaac 240
 ggcggtgcgt gcgggatcaa gaacgtgaac ctgccaccct acagcggcat gacggcgtgc 300
 ggcaacgtcc ccatcttcaa ggacggcaag ggctgcggct catgctacga ggtgagatgc 360
 aaggaaaaac ctgagtgtc gggcaatcca ttcacggtgt acatcactga catgaactac 420
 gagcctatcg ctccctacca cttcgacttg agc 453

<210> 4133
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-B12

<400> 4133

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 gtgaccgtcg tggggtcgac gccggagggc gagtgggtga acaccgtggt ggaccgggac 120
 ctgcggggcg aggaggagga ggacaaggag gagatgggtga agctgatcag ggtcggcatg 180
 gcgtgctgcg agagcaacgt ggacaaccgg tgggagctca agaccgccat cgagaggatc 240
 gaggagctca aggccaagga gcgccccgac gaggagcaag cgacggtgat cgacgaggac 300
 tacagcgatg ttgccctcaa ctgatcatcg acacgaaccg gccgggaatc gatcgatang 360
 gaaggttgtg cgcaagctga tgatatgagc ccaaaatgtg atgacctgca tgcattgccga 420
 gaccctaaac at 432

<210> 4134
 <211> 326
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-B2

<400> 4134

cccacgcgtc cgaccacgcg accgcccacg cgtccgcaca ttcaagcacc tcctcctccc 60
 ccgcccggcca acaactcagc cgccgcaacc gccacatcag ccatggggcgc ctgcgcaacc 120

aagcccaaga cgcttgaggg gcangcccca gctgaggccg ccgtctccac acccaaaggt 180
 tgcgcccagag gccactccaa tctccgttga ggttgccggt gatgaacagg tagctganaa 240
 ggtggtggtg gaggagccgg ctgcggcggc cgacgttgaa catcagaagg ctaatgaggt 300
 ggtcgctcca gaggcggccg tcgccg 326

<210> 4135
 <211> 86
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-B4

<400> 4135
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 ggacgctgag ggcgggcgaa ggctcc 86

<210> 4136
 <211> 269
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-008-Q1-E1-B5

<400> 4136
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 cgaattacgt gccttcttcg tcacaggctc cgtccttatt tgtagattga agcttacatg 120
 aacatttgac tagatcatcg aaggattggt aggcctcttt aaagttgggg tcgtgaaggg 180
 caataaactt gcctagcggg attcaagatg gagcgattcg tagttcgtcc taggacttgg 240
 ggagaagaag tttaacaaga acgtgaaga 269

<210> 4137
 <211> 258
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-008-Q1-E1-B6

<400> 4137
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aagggagacg tttggaaagc aaaaaagaaa gaaaatacgg tgctgtttgg ctggcttgtc 120
tcaaaattgc cacgttatgc tttcatcata gtgtctgccg ttgaaatgtt gtagtagtaa 180
aatcgtaggg tgtaaaatgt tttcttgtaa agtcattgtg tataccaacc aaattcaaga 240
aagcttacaa gttggccc 258

<210> 4138
<211> 396
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-008-Q1-E1-B7

<400> 4138

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ggtgccgctc cgctctcgtc cccccggtc cgcncggcc tgcttgccgg aaccaggttg 120
gcagggcact ccggcaacca cttggttggg aaggcaacga caccacccta tgctctgtcc 180
tcgcccgcag attaagattg caccaccagt gaatttgaa ccttgaagca ttcattctgag 240
acatggaaaa agtgatctgc tgggcatatc tccttcaacg caagcagttc tcgaaagaaa 300
ctcttgattg ctgtgtctta gctcgtggga acactcctct ctctctctc gtgaactaca 360
catagtgggtt atatgttctt ctatgctcaa caacaa 396

<210> 4139
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-B8

<400> 4139

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ggacttcata gccacgagg ccatctcgtc gagcgtggcc gagttcagct gggacctcaa 120
gttccccggc gcgcaggtgc tgctggccga gttcaacatg acctcggcgg gcggcgcgca 180
gaacttcaag tcgcaggcgg acaacttcgt gtgcgcggtg ctgccggaca cggcgttcca 240
ccaggtgttc atcaccccg gcggcgtgat ccacctccgc gacggcgcca actcgcagta 300

cgtgaccagc acggcggttcc tgctggtggt gtacgcggac ctgctgctgc ggacggggca 360
 gacggtgctg tgcgggaacc agccgctgcc cccggcccgg ttgcacgagt tcgcgcggca 420
 gcagatggac tac 433

<210> 4140
 <211> 378
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-B9

<400> 4140

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 aaaaaaaaaa aagaaaaaaaa aaaaaaaaaa aaaaaaaca acaaaaaaga agacacgtca 120
 aacgtgggga ggattcacat ggggcttcaa gttcccgctg gcgcaagtgc tgctggacga 180
 gttcaccatg acgtcagctg gctgcactta caaggtcatc tcttaagcgg gcaacttctg 240
 gtacaccgtg gtggtggcca aagttttcca ccatgtgtta aacacccctt gcggcatgag 300
 tcatcttcgc aacggggcca actcgcatta ctttccaac attttgttcc tgctggtggt 360
 gtacggggac ctgctgct 378

<210> 4141
 <211> 392
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-C1

<400> 4141

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 agggcatcga tgcgaaagcg tccgggcctg gtgggtcctt cgacatcacc aagttgggag 180
 cctccggcaa tggcaagaca gacagcacga aggctgtgca ngaggcatgg gcatcggcgt 240
 gcggcggcac tgggaagcag acaatcctca tacccaaggg cgacttcctt gtcggacaac 300
 tcaacttcac aggccttgc aaggcgacg tgacaatcca ggtggatggc aatctgctgg 360

caaccacgga cctaagccag tacaaggacc at

392

<210> 4142

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C10

<400> 4142

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gacgtcgtgc gcaaggaggc cgagaactgc gactgcctcc aagggttcca agtatgccac 120
tccctgggtg gcggcactgg ttctggcatg ggcacgtgc tcatttccaa gatccgggag 180
gagtaccggg accgcatgat gctcaccttc tccgtgttcc cgtcgcccaa ggtgtccgac 240
accgtcgtgg agccctacaa cgccacgtg tccgtgcacc agtcgtgga gaacgccgac 300
gagtgcattg tccttgacaa ctatgcgtc tatgatattt gcttccgcac cctcaagctc 360
accaaccctt catttggtga cctgaaccat ctgatctcgg cgaccatgag cggcgtgaca 420
tgctgcctgc gggt 434

<210> 4143

<211> 313

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C2

<400> 4143

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cagtttactc acccctctta gtcgattgtt atttaagtgc agtctcttcg gagatgcaat 120
tacagtccat cctctctttc ttttccctt tctcaaagag ctaggacctt gctcgactga 180
gcatcaggct gtacggctct ttgtgatcat cttttgccag ttttcttctt gtagcacaag 240
ttgttgggca tggaactcct gttcctttca ccaatagaag cataatgatc agcactgtga 300
aacaagaacc gaa 313

<210> 4144

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C5

<400> 4144

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 gaaaggaagg aagggaccgg aagcatcagc catgtcgaac tcggcgtcgg gaatggccgt 180
 ctgtgatgaa tgcaagctca agttccagga gctcaaggca aagaggagct tccgcttcat 240
 cgtgttcaag atcaacgaga acgtgcacca ggtggtggtg gacaggctag gggagccagg 300
 cgagagctac gacgccttca cggcctgctt ccccgccaac gagtgccgct acgccgtgtt 360
 caattttgac ttcgtcactg acgagatctg ccagaagagc aatatcttct ttacctcttg 420
 ggccccggat acatc 435

<210> 4145

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C6

<400> 4145

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 ttctgcaaga tgcagggcat ctgttggagc tggggcgggc ccatctgggc gttcagcgtc 180
 gtcacctact tcccgtgga cgtgctcaag ttcgccatcc gctacgcgct ctccggaaag 240
 gcctgtcaca acatcaacaa caacacggac ttcaccaacc gcaccgacta cagcaacggc 300
 gaacgatagg cgcagtgggc catggcacag atgacgtgc atgggctcaa ccaggccacc 360
 gctacctccg acctcttcgg cgacaaccag cgctaccgag agctgtcgga tctcgccga 419

<210> 4146

<211> 442

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-008-Q1-E1-C7

<400> 4146

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gctggtactg ctccggtctcc gctgtgtgct tctgggttggg gttgcgcagg cggtagtgga 180

gttgggtgcct gctgatgata atatcgccgc cgccgctgct ggcacggcgg tggacgatgg 240

cgagccgcct cagcagtgcg cgaccccggt gagcgtggag gaggcgtgcc gcggcgcgtc 300

cgagacgcac gccggcgtgg cctaacgaca ctgcatggcg tcgctgggcg ccgacccgcg 360

cagcaaggag gccggcaaca ngaacatgca cgggctggcg gtgctggcca caggatggcc 420

atcgnacacg ccccgagca cg 442

<210> 4147

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C8

<400> 4147

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gccgaagatg accagttcca gcaacagtaa cagcaccgga catgtgatgc tggtagtgct 120

cgggtctccgc ctgctgcttc tgggttgggtg tgcgcacgcg gtagtggact tggtagcctgc 180

tgataataat atcaccgccc cgcgtgctgg cagggcgggtg gacgatagcg agccgcctca 240

ctactgcacg accccgggtga gcgtggagga cgcgtgccgc ggcgcgtccg agacgcactc 300

cggcgtgggc tacgaccact gcatggcgtc actggacgcc taccgctca gcaaggaggc 360

cgagacacga acatgcacag gctggcgggtg ctggccacca cgatggccat ccatcacgcc 420

gccagcaacg 430

<210> 4148

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-C9

<400> 4148

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 catttactgg tgacgttgag gctgtggaca ctgcgaaaga tctccgttac agaggggttca 120
 gagtctggcg tgccgtcatc gatgatctac ttactgtgag gggaatgagc aaggcgcaaa 180
 atgctcttct ttctggatgc tcagccggag gtctagcagc aatactacac tgtgacagat 240
 tccatgatct gtttccagcg aaaacaaagg tcaagtgttt ttctgatgct ggatattttt 300
 tcgatgggaa ggatatctcc gggaactttt acgctaggtc aatctataag agcgttgatga 360
 atctacatgg atcagccaaa aatttaccag cttcatgtac ctcaaagcca aagcaatcac 420
 ctgagctgtg tatgttccac agtatgttgt cc 452

<210> 4149
 <211> 465
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-D1

 <400> 4149

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 ggcgggccagc ggcgagagcg cgagaggaag agcaggagga ggggtcggcc atgacgggga 120
 atgcgaagcc gaagaagcac acggcggaag agatcgccgc gaagatcgac gcggcgacga 180
 cgaaccgggg cggcggcaag gccgggcaag cggaccggct ggggcaggac aaggcggggc 240
 atgcgaagct ggcgtgcccc ctctgccgca ccccggcgcc cgacatcaag tccatgcaga 300
 tccaccacga ggcgcgccac cccaagctcc ctttcgagcc ggagaagctc ctcaacctgc 360
 actcctccgc ccccgctgct gccgcccgcg ccggcgggcg cgcccgccgc cgccgacgcc 420
 aacaactcca agcccaaagc ccggcggtcc gcggcagcct caaag 465

<210> 4150
 <211> 455
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-D11

 <400> 4150

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aagcttgcca tggcgccgt cccgtccgac aggggccacc accaccaccg ccgctccgag 120
 gcgtcgtgtc cggcaacctc cgcggccgtg gcggcgccga gggccgatga cgccttgccg 180
 cagcgcccg cggggctcgt gcaggtccg gagcgggacc agggcccgct gtcgacgggg 240
 caccagcacc tgcaccacca tcaccaccag ctgcggcggt cggcggcgtt cccaccccg 300
 cgcccggggc cggggcgccg ccctcctcag cgctgcgaaa gcgacctcaa catcaggag 360
 caccgctcct gcagcgaggt ggccggcggc accgcggcgg gctgcgccgc tgtgtgtgtc 420
 tgcttcccct gcgtcatggt ggaggtcgcg gtgct 455

<210> 4151
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-008-Q1-E1-D12
 <400> 4151

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 ctggcctaata cactagtata aagcaggcgg agacagccgg cccctctggc ctcgctgtct 120
 ccccttcctc cccgtcccca cccacatgcc ctgcctccgc cccgccccgc cctgccaag 180
 ctgagttccc ccacccccca acaaacatt actagagtag ctgcattggc ggggaaatta 240
 aagcgctaga agctcagcag caatggcgga gcagcgggc gccggaagg actggtgcca 300
 catgtgcgcc gcggccgcta gccccgcgga gggcgaggtg gagatgaagt gcccgttctg 360
 ccacagcggc ttcctcgagg agatggagac cggccgcggg gccgcgaccg acgacggtga 420
 c 421

<210> 4152
 <211> 165
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-008-Q1-E1-D2
 <400> 4152

gtcgaccac gcgtccgaac atgcatcggg accgtctatg ggtgtgtgtg taaaagcat 60
 gtggacgtct ttgtgggcac aggttgcgat ggttatggcg ttggagtact tggtgaaaag 120

gtcattgtga ggacctccca atctcccacc aggcataaac atcac

165

<210> 4153
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-D5

<400> 4153

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tccaccacca ccaccaagct caacaacagc cagctcgcga aaatattgaa agccgcaaca 120
tggcatcatc cggcgcgccc cttgggggtac ctttccccc attgggggca acggcccaaa 180
aggtaccgta ggcaaagaga agaaaaccgg cggcaaccgc taaggcggcg aaggcaaaaa 240
tattcaggac gacttctgct cgacgctgtt caaaggcatg aaggggacgg acctggtcct 300
gtgcaaagag tcctgcgcgc tctcccagca ctccaacctg gtgctgtacg gcaggattca 360
gtgcaagggc aagtgcaccg agcagaaggg catcacggcg ccggccatga aggtctgcca 420
ggaggattgc gacaag 436

<210> 4154
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-D6

<400> 4154

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cgaagcggct gtcttggggg cacaagagca tgcagctgca ggacacgaac cagagccacg 120
tgcacgccga ggaatcgctg cccgttgttg ccaaagcgg cgcggcggtg gcgaggaacg 180
acggcgactc gcggctgctc gtcgacctgg agcccgtgcc ggcgatcaga ttcagcaagc 240
ggcacggcga cgacggcgcc ggcgaccacg cgccgccgta cgccaagacc ttgtccagca 300
gcttcaagga gccggcccgt gtcgcggaac gccgccctct ctccggcccc gggcagctcg 360
ccgctccac cggtttcgcc tgggccaaga agccccggtc cgtcgccagg tcttcgacgg 420
cggcagccgc cgtcaca 437

<210> 4155
 <211> 451
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-D7

 <400> 4155

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 caagagaact gctgcccccg ctgaagcacc cgaagccgca tccacccccg tcgccgccgc 120
 tgccccatcg ccgtcgtcta ggaagtctgg tccagctacc gcgccagcca ccgcctctac 180
 acccccttct tccacggacg aggagttgag cccttccccg ccagcatcca ccgccgcggc 240
 gtcccctgcg gctgagggac cggctgtga tgactccgcc ggtgtgtgtg cccttggaag 300
 tggagctgcc atcgccggcg ttgccgtgc tgttgctacc atgatcttct tctactaaac 360
 tcaccgacga tggtcgtgtc gcggtgagac attaggggtg acacgtaatt ggctgtgtgtg 420
 taatcgctct cgtctggtgg ggaaggaagg a 451

<210> 4156
 <211> 432
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-H3

 <400> 4156

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 ccatcaactg ctcatccaac aacaacatcc tcgtcaacgt gttcaacatg ctcgaccagc 120
 cgctcctctt cacatggcac gggatccagc agaggaagaa ctcgtggcag gacggcatgc 180
 cgggcacat gtgcccgatc cagcccaaca ccaacttcac gtaccactgg cagcccaagg 240
 accagatcgg cagcttcttc tactaccca gcaccggcat gcagcgggcg gcggggcgct 300
 acgggctgat cagcgtccac agccgtgacc tgatcccgtt gcccttcgac acgccggccg 360
 acgacttccc ggtgtcatc ggcgactggt acaccaagga ccacgccgtg ctggccaaga 420
 acctggacgc cg 432

<210> 4157
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-H5

 <400> 4157

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 agtccgcgtc cgccgtcacc cgctacgccg gctccagcgc cccgccggcg ccgaacatga 120
 ccgagccacc ggccgggtgg gcctgggtcca tcaaccaggc caggtcgttc cgctggaacc 180
 tgacggccag cgccgcgcgg cccaacccgc aggggtccta ccactacggc cagatcaaca 240
 tcaccgcac catcaagggtc atgggtctccc gcggccacat cgacggcaag ctccgctacg 300
 gcttcaacgg catctccac agggaccgag agacccccgt gaagctcgct gaatacttca 360
 acgtcaccga cgggggtgttc agctacaacc agatgggcga cgtgcccccc gccgtgaacg 420
 ggtccctcca tgt 433

<210> 4158
 <211> 453
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-H6

 <400> 4158

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 ccgatcagcc aagagctatc catacgcaca gcgatgcacc agcacgagat actagccatc 120
 atgcgcctgt cgctccctct cctcgtcgtg gccgccctct cggcgcgcgc cgccggcgag 180
 caggtgccgc cgggtgggagg cagcgtctctg aagccggact actacagcca gtcgtgcccc 240
 cgcgcgaggc ggatcatcgc ggaggtgatg cagacgaagc agatggcgaa cccgacgacg 300
 gccgcgggca tgctgcgcgt cttcttccac gactgcttcg tcaccgggtg cgacgcgtcg 360
 gtgctgatcg cgtccaccca gttccagaag tcggaacacg acgcggagat caaccactcg 420
 ctccccggga cgccttcgac gccgtggtgc gcg 453

<210> 4159
 <211> 432

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-H7

 <400> 4159

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 agaaaacatg tcttctcgct ggggttagggc ggaggtgtac ccgctgttcg cgacgacagg 120
 ggtggcgggtg gggatctgcg tgatgcagct ggtgcgcaac atcaccacca acccgagggt 180
 gcgggtgacc aaggagaagc gggcgggccgg ggtgctggac aaccacgacg agggggcggcg 240
 ctactcgacg cagggcgtgc gcaggttctg gctctccaag cgccgcgact acatgcaggc 300
 catggacaag gtgcccacgg accctaataa gtagacgacg acgatatacc ccaatgcatg 360
 gcaagaagat atatatatca gcacaacgca actgcatgcg atgctgcttg ttgctgcaat 420
 taatccacta ta 432

<210> 4160
 <211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-H8

 <400> 4160

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 aggagctgga ccagccgctc aactacgcgc gcgtctacct cgccgacacg ctgccgcgcg 120
 acgtgcgcgc cgtcacgtac ctcgactccg acgtggtcgt ggtggacgac gtccggacgc 180
 tggcgctccgt ggacctcgcg ggccacgtgg tggcggcgcc cgagtactgc cagcccaact 240
 tcagcaacta cttcacggac gccttctggt cgcacccggc gctcaacggc accttccacg 300
 ggcgcgcgcc atgctacttc aacacgggcg tcatggtcac ggacgtcgac aagtggcgcg 360
 ccggcgggta cagc 374

<210> 4161
 <211> 210
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-001-Q1-E1-H9

<400> 4161
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 tcattttcta cacaattgat atagtagatt aacatcaaac tctacgtaga tgtgaagata 120
 aataatgtgg taaaagtttg atgttaatct actatatcaa ttgtgtagaa aatgattata 180
 tagaaacgaa tagaaaagat taagcttcaa 210

<210> 4162
 <211> 326
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-A1

<400> 4162
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 aacgccctcc gctgcggcaa ggtcgtgggg ctgccgtgc cgccgtccta cgccccgcg 120
 cgctaagacg acgaaggcct cgttttctcc tcgtggtctg accatccaat ccaaactcaa 180
 aagaacaaat acgaaagaag cgtagtgaag gggaacaaat gaatggatat atgtaatctt 240
 gagatgcatg ccctctcaaa tcaactgtact ggggttctca aaaaaatcat tgtaatggga 300
 gttatatata taactttatc tcacca 326

<210> 4163
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-A10

<400> 4163
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 ccacagggac accgagaccc ccctcaagct cgccgagtag ttcaacgtca ccgacgggggt 120
 gttcagctac aaccagatgg gcgacgtgcc ccccgccgtt aacggggccac tccatgtcat 180
 cccaacgtc atcaccgccg agttccggac cttcatcgag atcgtcttcg agaacccccga 240
 gaagagcata gactccctcc acctcgacgg ctacgccttc ttcggcgctcg ggatggggcc 300
 tgggacgtgg tcgccggaga tgaggaagac gtacaaccta ctggacacgg tgagccggca 360

cacgatccag gtgtacccgc ggtcatggac ggcgatcatg ctgacattcg acaacgcggg 420
ca 422

<210> 4164
<211> 423
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-002-Q1-E1-A12

<400> 4164
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acaacgtcaa ggccaagatc caggacaagg agggcattcc cccagaccag cagcgggtca 120
tctttgctgg aaagcagctt gaggacgggc gcacgcttgc cgactacaac atccagaagg 180
agagcacccct ccacttggtg ctgcgcctca ggggaggcat gcagatcttc gtgaagaccc 240
tgaccggcaa gactatcacc ctcgagggtg agtcttcaga caccatcgac aatgtcaagg 300
ccaagatcca ggacaatgag ggcacncac cggaccagca gcgtttgatc ttcgctggca 360
agcagctgga ggatggccgc acccttgccg attacaacat ccagaaggag agcacccctcc 420
acc 423

<210> 4165
<211> 452
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-002-Q1-E1-A2

<400> 4165
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gacattggtc accacacatc tggcgatcac cagaagcttt tacttgccta tgtggggatt 120
ccacgctacg aaggctctga ggttgatcct accattgtga cacatgatgc aaaggatttg 180
tacaaagctg gtgagaaaag gctgggtacg gatgagaaga cctttatccg cgttttcact 240
gaacgcagtt gggcacactt ggcacatgtt tcgtctgcct accatcatat gtatgaccgg 300
aaattagaga aggttatcaa gagcgaaaca tctggaaact ttgaattcgc acttttagct 360

atcctcagat gcgcggaaaaa cccagcagag tattttgcaa agctcttacg aaaggccatg 420
aaagggtctag gcactgatga caagacactt at 452

<210> 4166
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-A3

<400> 4166

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tcagcatggt cgccgtcgtc ctggctgcca tcgccacagt agcgctcgcg gaggaagccg 120
atccgcgggc actgccggca cagtggacca ccgcgaagaa gtacaaggcc acgatggacg 180
ccaagacgcg gcaggctttc gacggcgtgg tggccgccgc tacggcagag aagcgggtccc 240
aggcgggtgga ggccgtgctg cagcagcagc tgaacatgga cgtgtccctg tccaaggcga 300
cgtcttccgg ggacgagaac aactacgtga gcgtggccgc cgcctacgag aaggccgcgg 360
gcgccgtcat cgccggcgacg ccggacaaca agctccgcgc tatggcggtc gcgttcga 418

<210> 4167
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-A4

<400> 4167

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tagcggccgc tctgtcgccc ttcgttcacc tctcttccct ctctccctg cctgccaggg 120
agaggggaag tcagaggcac ggagtggcg agagcagacg cacgtgaacc attgtagctg 180
tccctgtcgt cgtcgtcgtc gtcaacgaat ccacacaagg aaaggatgga gaagaagccg 240
accatcctca tgaacaggta cgagctcggg cgcacgctcg ggcagggcac cttcgccaag 300
gtgtaccacg gccggaacct cgcgccggc gagagcgtgg ccatcaaggt catcgacaag 360
gagaagggtga tgcgcgtcgg catgatcgac cagatcaagc gcgagatctc cgtcatgcgc 420
ctcgttcgcg acccaacgt 439

<210> 4168
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-A5

 <400> 4168

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 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-A6

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<210> 4170
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 <212> DNA
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<223> Clone ID: LIB148-002-Q1-E1-A7

<400> 4170

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gcagttcgcc agctacgtgg agacggacgc gctgctgcgc agcgcccggt cgacctcgtc 360
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<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-A8

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<210> 4172

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-B12

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 agga 364

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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-B3

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<210> 4174
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-B6

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 gacgagtgca agctcaagtt ccaggagctc aagtcgaagc gaagcttccg gttcatcacg 180

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ttcgacttca ccaccgacga gaactgccag aagagcaaga tcttggtcat ctctgggtcc 360
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<210> 4175

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-B7

<400> 4175

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aaggacgtca cgttccgcaa catcaccggc acgtcgtcca cgcccaggc catcagcctg 360
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<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-B8

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tcctctccag cagcgtgcat tggttagctc agcaccgatg acgcctaagt cgtcacctcc 420
accggttggt gtgagctcac 440

<210> 4177
<211> 344
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-C1

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ttcttttctt tttctctacg acttcgttat tccctccttt catctatctc tccgtgaact 180
cggtttgctg tccagctggc tgtaagtgtc ccagatgcct tcgttacgct tgatgaggct 240
catgacaatg gcgattttgg catggagttg tgtagcctc gcggaaaaac tgtaactgtg 300
taagcagaac tgctatatat tgttcctaac aatggtgtcc ttaa 344

<210> 4178
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-C11

<400> 4178

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ctgctcgtgt acgtgtcggc cgaggtgggc atgaccgtgg ccgcgttcgc gcatcacgag 360
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<211> 419
<212> DNA

<213> Zea mays

<223> unsure at all n locations
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 <211> 439
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
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<400> 4180

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 tttcaaaaata atcgaaaaga gagatggggg taggaagaac gggggctatg tagctagaaa 240
 caaaacgtgt tgtggtttga gaggaacca cgaaacggca ctagtttgag acagtgttcg 300
 agaaatagca attgttttca aacaattcaa agaacaacag tagttttatc aaatgaattt 360
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 accagattgc ccctatctt 439

<210> 4181
 <211> 456
 <212> DNA
 <213> Zea mays

Case	Model	Method	Results	Comments
1	Linear	OLS	0.85	Good fit
2	Quadratic	OLS	0.92	Excellent fit
3	Cubic	OLS	0.95	Excellent fit
4	Quartic	OLS	0.97	Excellent fit
5	Quintic	OLS	0.98	Excellent fit
6	Sixth	OLS	0.99	Excellent fit
7	Seventh	OLS	0.99	Excellent fit
8	Eighth	OLS	0.99	Excellent fit
9	Ninth	OLS	0.99	Excellent fit
10	Tenth	OLS	0.99	Excellent fit
11	Eleventh	OLS	0.99	Excellent fit
12	Twelfth	OLS	0.99	Excellent fit
13	Thirteenth	OLS	0.99	Excellent fit
14	Fourteenth	OLS	0.99	Excellent fit
15	Fifteenth	OLS	0.99	Excellent fit
16	Sixteenth	OLS	0.99	Excellent fit
17	Seventeenth	OLS	0.99	Excellent fit
18	Eighteenth	OLS	0.99	Excellent fit
19	Nineteenth	OLS	0.99	Excellent fit
20	Twentieth	OLS	0.99	Excellent fit
21	Twenty-first	OLS	0.99	Excellent fit
22	Twenty-second	OLS	0.99	Excellent fit
23	Twenty-third	OLS	0.99	Excellent fit
24	Twenty-fourth	OLS	0.99	Excellent fit
25	Twenty-fifth	OLS	0.99	Excellent fit
26	Twenty-sixth	OLS	0.99	Excellent fit
27	Twenty-seventh	OLS	0.99	Excellent fit
28	Twenty-eighth	OLS	0.99	Excellent fit
29	Twenty-ninth	OLS	0.99	Excellent fit
30	Thirtieth	OLS	0.99	Excellent fit
31	Thirty-first	OLS	0.99	Excellent fit
32	Thirty-second	OLS	0.99	Excellent fit
33	Thirty-third	OLS	0.99	Excellent fit
34	Thirty-fourth	OLS	0.99	Excellent fit
35	Thirty-fifth	OLS	0.99	Excellent fit
36	Thirty-sixth	OLS	0.99	Excellent fit
37	Thirty-seventh	OLS	0.99	Excellent fit
38	Thirty-eighth	OLS	0.99	Excellent fit
39	Thirty-ninth	OLS	0.99	Excellent fit
40	Fortieth	OLS	0.99	Excellent fit
41	Forty-first	OLS	0.99	Excellent fit
42	Forty-second	OLS	0.99	Excellent fit
43	Forty-third	OLS	0.99	Excellent fit
44	Forty-fourth	OLS	0.99	Excellent fit
45	Forty-fifth	OLS	0.99	Excellent fit
46	Forty-sixth	OLS	0.99	Excellent fit
47	Forty-seventh	OLS	0.99	Excellent fit
48	Forty-eighth	OLS	0.99	Excellent fit
49	Forty-ninth	OLS	0.99	Excellent fit
50	Fiftieth	OLS	0.99	Excellent fit
51	Fifty-first	OLS	0.99	Excellent fit
52	Fifty-second	OLS	0.99	Excellent fit
53	Fifty-third	OLS	0.99	Excellent fit
54	Fifty-fourth	OLS	0.99	Excellent fit
55	Fifty-fifth	OLS	0.99	Excellent fit
56	Fifty-sixth	OLS	0.99	Excellent fit
57	Fifty-seventh	OLS	0.99	Excellent fit
58	Fifty-eighth	OLS	0.99	Excellent fit
59	Fifty-ninth	OLS	0.99	Excellent fit
60	Sixtieth	OLS	0.99	Excellent fit
61	Sixty-first	OLS	0.99	Excellent fit
62	Sixty-second	OLS	0.99	Excellent fit
63	Sixty-third	OLS	0.99	Excellent fit
64	Sixty-fourth	OLS	0.99	Excellent fit
65	Sixty-fifth	OLS	0.99	Excellent fit
66	Sixty-sixth	OLS	0.99	Excellent fit
67	Sixty-seventh	OLS	0.99	Excellent fit
68	Sixty-eighth	OLS	0.99	Excellent fit
69	Sixty-ninth	OLS	0.99	Excellent fit
70	Seventieth	OLS	0.99	Excellent fit
71	Seventy-first	OLS	0.99	Excellent fit
72	Seventy-second	OLS	0.99	Excellent fit
73	Seventy-third	OLS	0.99	Excellent fit
74	Seventy-fourth	OLS	0.99	Excellent fit
75	Seventy-fifth	OLS	0.99	Excellent fit
76	Seventy-sixth	OLS	0.99	Excellent fit
77	Seventy-seventh	OLS	0.99	Excellent fit
78	Seventy-eighth	OLS	0.99	Excellent fit
79	Seventy-ninth	OLS	0.99	Excellent fit
80	Eightieth	OLS	0.99	Excellent fit
81	Eighty-first	OLS	0.99	Excellent fit
82	Eighty-second	OLS	0.99	Excellent fit
83	Eighty-third	OLS	0.9	

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<223> Clone ID: LIB148-002-Q1-E1-C9

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<210> 4187
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 <212> DNA
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<223> Clone ID: LIB148-002-Q1-E1-D10

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<210> 4191

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-D3

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ctcgatctaa tgtcgtccca ggacacattg ttgtggacag atttaattag cgtcgggttg  360
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<211> 425

<212> DNA

<213> Zea mays

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<210> 4194
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 <223> Clone ID: LIB148-002-Q1-E1-D6
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<212>	DNA
<213>	Zea mays

<400> 4195

<210>	4196
<211>	436
<212>	DNA
<213>	Zea mays

<400> 4196

cacagccgcg gcgtct

436

<210> 4197
<211> 326
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-D9

<400> 4197

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tgaccatcca gtctaactaa tccattcctg tgctgctcgg cgaaataaaa tcatcaaaaa 120
gaacaaagac gaaggaagcc tagggaaggg agaagggacg ttgggtgggg gtgagccaaa 180
tgagaacgca cggatatatc tattgatgta atcttgagat gccctctcaa atcactgtaa 240
tggggtttaa aaaacaatca ttgtaatggg agttatatat acttttatct taacatttat 300
ttacaccagc aagtcctggg gtatgc 326

<210> 4198
<211> 95
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-E1

<400> 4198

tccgggaagc ccgggtcgac ccacacgtcc gctggggttc atgatccatg gaggcgatgt 60
cactaagagg atgggcagtg tgggctagtc aatct 95

<210> 4199
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-E10

<400> 4199

ccacgcgtcc gcccacgcgt ccgccacgc gtccgagaag atccaggacg acttctgctc 60
gacgctgtgc gagggcaaga aggggacgga cctggctcgtg tgcaaggagt cctgcgcgct 120
ctcccagcag tccaacctgg tgctgtacgg caggatccag tgcaagggca aatgcaccga 180

gcagaagggc atcacggcgc cggccatgaa ggtctgccag gaggagtgcg acaaggcgta 240
 cgtggtgaag gcggccgatg tcaccaaggc ctgcagcgtc acctgcgcca aggagaagaa 300
 cccgcgcctc agcgagaact gcaagaggtc ctgcaccctt cctccttctt gaagcgaagc 360
 cccttgaaat gaatgaacca tgcattgatg catgcatgta tgcattgcgc ggggtgacgt 420
 ggcg 424

<210> 4200
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-E11

<400> 4200

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 ctctctctc caacacccca tccatcagcg ctgcctcccg cattgctctt gatcccatcc 120
 agtacatcga ttctcccccc aagatcaaag gccggtggag gaagaaagggt tagggagtcg 180
 gccatgggat gcttttcatg ctgctgtgtg gcagatgacg acaacgttgg caggaggaag 240
 aagcatgacg atccctatgt tctatccct gctcatgttt ataattttgg acctagccgg 300
 ttcccagccc caaccctgt catctccact ggcagagctc agccaattgc agtaccggcc 360
 attcatctgg aagagctgaa ggaaattaca ataaacttca gcagtgatgc cctcattg 418

<210> 4201
 <211> 420
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-E12

<400> 4201

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 gttccgtcca tccaacgccc cggctgtctc ccggccagat ccctctcctg catggtttct 120
 ttgcgagtgg ccggagaaga tgattggcgg gttcctctcc aaagtcctcc tgctggcttt 180
 tggctatgcc tatcctgcct atgaatgcta caagaccgtt gaactgaaca aaccacagat 240
 tgagcagctc atattttggg gtcagtattg gatttttagtt gccctgttga cagttttgga 300

gagaattggc gatttttagac tatcatgggt accgttttac tcagaatcaa atgtgttgat 360
 ctatgtagat ttgtggtacc ctaagacaaa gggaactacg tatgtttatg gcactttctt 420

<210> 4202
 <211> 463
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-E2

<400> 4202

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 gcaaggatga gtggccggct aggctagctg gtgcttgac gtcataagct gcctcctgcc 120
 tgccgtttga ttcctgtgca acaagaaggc tgacaaaaat aaaaggggggt gggtcagtga 180
 atggacattt taaaaccagt tagcaccggc atctaccgca agctagtttg aagttggtat 240
 aataggtgca agcgaataag acggacacgt atcagtgac actgcaagta aatccaccgc 300
 caaatttgcc atcctagga agaaaaatga ttccttggtt aacttggtga acccgattta 360
 atttgagaca agacaacaat accagggttg agcttgccac ttggtcatga cacacacgag 420
 aatacgagat gaccaagtaa aaactggaca gaatgcactc aca 463

<210> 4203
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-E3

<400> 4203

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 cctgttcttc aggacgtgtt catggagccc cagcccgggt cgccgacgtc gtcgcccttc 120
 tctccgatgg gagcgccgga cgagccagag gaggaggcca ccgaagtcga tccgggcagg 180
 aagtcgacct ccagctcgtc ctctctctcg tcgtcatccg cgtcgtcggc tgatgacatc 240
 ccgtgccaca tcgacgtcga gctcgtcaaa ccgtttggcg cgggtgctgcc cgagcacgaa 300
 cacggagcgg aggccaaaac ggtccgatcg gcgacgccga aggaggaacg agccggagcc 360
 gccacgtgc acggcgagcc ggcggactgc gcggtgacgg aggacgtaca acaggccgggt 420

<210> 4204
<211> 463
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-002-Q1-E1-E4

<400> 4204

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atgcacaaac aatgcgatga gagccttggt cctcctggtc ctcttctgca tcgtgcatgg 120
tgagaaggaa gagtcaaagg gcatcgatgc gaaagcgtcc gggcctgggtg ggtccttcga 180
catcaccaag ttgggcgctt cgggcaatgg caagacagac agcacgaagg ctgtgcanga 240
ggcatgggca tcggcgtgcg gcggcactgg gaagcagaca atcctcatac ccaagggcga 300
cttccttgct ggacaactca acttcacagg cccttgcaag ggcgacgtga ccatccaggt 360
ggatggcaat ctgctggcga ccacggacct aagccagtac aaggaccatg gtaattggat 420
cgagattcta cgcggtggata acctggtcat caccggcaag gga 463

<210> 4205
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-E5

<400> 4205

ccaaacgtcc gcccgactac gcaacctgtg tgaagatctc cactgatgct tccatcaagg 60
agatgattcc tccgggcgct ctggtcatgc tgactcccct catcgttgga accctctttg 120
gcgtcgagac tctctccggc gttcttgctg gtgccctggt ttctggagtg cagatcgcca 180
tctctgcttc caacaccggc ggtgcatggg acaatgcca gaagtacatc gaggctggtg 240
ccagcgagca cgcgaggacc ctcggtccca aaggatccga ctgccacaag ggcggctgtg 300
attggtgaca ccattggtga cccctgaag gacacctccg gcccgtcctt caacatcttc 360
atcaagctca tggccgtgga gtcctcgtg tttgccccct tctttg 406

<210> 4206
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-E6

 <400> 4206

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 ggcgaccagc tcgttgctgc cttcgagacg taccagcagc tgagccgcgt gtctatccgg 120
 gccatgacgg ccatctccga cctggaaacg atccacgagg acgtcgtcac cagcgcgcac 180
 cagaagcgag ccgcgctcat cgtgctcccc ttccacaagc tccaccagat cgacggccac 240
 atggagtcgc ttggcgacca gtaccagcac atcaaccagc gcgtgctcca ccacgtctcc 300
 tgctccgtag gcatactcgt cgaccgcggc ctcggcgggtg tcgctcaggt ggccgccagc 360
 gacgtgtcat acaccatcgt tgtcatcttc ttcggtggcc gcgacgaccg cgaggccctg 420
 gcctacggca tgcgcatggt cgagcac 447

<210> 4207
 <211> 232
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-E7

 <400> 4207

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 aaggcttatc gtgtgttggt cctccgttgc gactacgggg atattaggtt gtgtgtgtat 120
 gtggaccgac accactgttg agctgtcgac ccattagggc tatggtcatt tgagtctata 180
 tattgtaccc catctcctat gcaatacaat caactactac agattcctgc aa 232

<210> 4208
 <211> 344
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-E8

 <400> 4208

ccaaacgtcc gatggcctct accgcaaagt catcgcaatc atccacaagg acttcgacgc 60
cacgataata atcagctgct ttggcgctac aatcatcgtc gatgtcatct tctctatgaa 120
aggggtgaatc aaattcttct cccattcctc catataaatc gtcactgtca ttagcgtcaa 180
catcatgtaa aacatctact atgtctaact ctcaacatgg gaagactaat acgtcgtctt 240
catcgtcttc atcgtcagat catacagctg cagtgataac tggccttgta cttgacgtcg 300
tgggcttcga tctgctcatg ttaaattccag gtgtacgtgt gttg 344

<210> 4209
<211> 422
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-002-Q1-E1-E9

<400> 4209

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agagatacag cagcggcaag aattttctcc gcaccgcggg cgtgtgctgt tgttcgccgt 120
ccgcctccgc caagcttgga ggtgtgcgcg gcaaggaaga gacatcgaca tcggcgccag 180
ctttcgcgcc ggatagcatc aagaaaaggt ggaggaatac gacgttctgg aaaaagaaga 240
tgaatgccag gaatgagatc ggcgggctgg tggacctcgt caacgatatt tcggccaagt 300
cagatgagag cctacgggtt agcaaecaca acatgccag cagggcgctg acgttcagtc 360
agctgagcgc cacatcngac gggttcagtt cgcagaacct gctcggagaa agcggctttg 420
ga 422

<210> 4210
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F1

<400> 4210

ccacgcgtcc ggtcatctcc tccatcacca ccaccaagct caacagcagc cagctcgca 60
aaataatgaa gagccgcagc atggcatcat cggccgcgct cttgggtgcta gccctcgcg 120
tagtggcggc caccgcccc catgtatcgg aggcaaagaa gaagagagcg gcggagagcg 180

gcgaggcggc ggaggcgaag aagatccagg acgacttctg ctcgacgctg tgcgagggca 240
 agaaggggac ggacctgggtc gtgtgcaagg agtcctgcgc gctctcccag cagtccaacc 300
 tgggtgctgtt cggcaagatt cagtgcgaagg gcaaatgcac cgagcagaag ggcatcacgg 360
 cgccggccat gaacgtctgc caggaggagt gcgacaaggc gtacgtggtg 410

<210> 4211
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-002-Q1-E1-F10
 <400> 4211

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 tggcggtggt cgtcggtgtg gtcgccaccg tcacccgctc cggcaagaag gccggcgaca 120
 acttcacggt cccggggggag gcttcccttg ccacgtccgg caagtcggtc aagtcctgt 180
 gcgcgcccac cctatacaag gagtcgtgcg agaagacact gtcccaggcc accaatggca 240
 ccgagaaccc caaggaggtg ttccacagcg tggccaaggt ggcgctggag tcggtccaga 300
 cggcggtcga gcagtccaag tcgatcggcg aggccaaggc cagcgactcc atgaccgaga 360
 gcgcgcgcga ggactgcaag aagtccttg aggacgccgc cgacgacctg angggcatgc 420
 t 421

<210> 4212
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-002-Q1-E1-F11
 <400> 4212

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 gggaagcgga ggccggcgcg ggccgggaag aaggagatct acgcgaggct cgccaggcct 120
 gtgccttttg gcgacggcaa gaaggaattc tggttggaca agaacaaagg catgatctgt 180
 atggcactgt cgtccaaagc actggtgatt actgggattg atgacagaag atactggcaa 240

cacatgccaa cttcagaatc gagattccag tctgtagcct accttcagca aatctggtgg 300
 tttgaggtgg ttggtgaagt cgatttctgc ttccctgttg gaacatatag cttgtacttc 360
 aggggccatc ttgggaagtt ctacagacga tttggccgcc gccagtgcac c 411

<210> 4213
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F12

<400> 4213

ccacgcgtcc ggactaactg tgcattctta ttgtcatcag ttactagttt cattgacacg 60
 tcaatgattt tattaatttt attgctttgt gcagatgctg ttaactagga cacgttgcac 120
 atgctgattt gtttcgcact actgcattgt agtttttggc tcaacatttg aattcatatg 180
 caatcaagaa ctttatctta gtgtgctaatt ttgtctgtca tgtagtcat aaataatacc 240
 tttagttctt aagagttcat actagatgtt ctctgatctg agtgctgcac tctttcgaac 300
 tatagtgcta agcttgctga tcaagctctt gcctccggaa agatttacga tggagatggg 360
 ttcaactaca tcaaataatc ttttgaaagt ggtactcttc accttactgg gttgttga 418

<210> 4214
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F2

<400> 4214

ccggaaagcc cgggtcgacc cacacgtccg ggaagagtca aagggcacg atgcgaaagc 60
 gtccgggcct ggtgggtcct tcgacatcac caagttgggc gcctccggca atggcaagac 120
 agacagcacg aaggctgtgc aggaggcatg ggcacggcg tcggcgga cagggaagca 180
 gacaatcttc ataccaagg gtgacttcct tgcggacaa ctcaacttca caggcccttg 240
 caagggcgac gtgaccatcc aggtggatgg caatctgctg gcgaccacgg acctaagcca 300
 gtacaaggac catggtaatt ggatcgagat tctacgtgtg gataacctgg tcatcaccgg 360
 caagggaaac cttgacgggc aaggcccagc cgtgtggagc aagaactcct ggcacaagaa 420

gtacgactgc aagatccttc cc

442

<210> 4215

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F3

<400> 4215

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aatcacaaag tgatcaaacg atgctcattc taccacgtcg gttccaagac aacttgctgg 120

cacagcattt ctgttgaact ttgcttttac tacatgatac ttcgagggtg cattgagacg 180

tagggttgcc ttgggaatgt gaacttcacc acatttcctg gtcctgccct gaccctgagg 240

catattgggc ttgcgatacc agggctctag ataagtaaga tatcccactt tgggtattgg 300

ttgttgatgc tcctgccaat ggcagttagc tggatccaac gggaagggtc agcaccagct 360

ggtggtgatg taaaatcctt cacttcatga attactgtac cattaccgtt tc 412

<210> 4216

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F4

<400> 4216

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gctggacgtg ctcaagttcg ccatccgcta cgcgctctcc ggcaaggcct ggaacaacat 120

caacaacaag acggccttca ccaaccgcac cgactacggc aagggcgagc gagaggcgca 180

gtgggccacg gcacagagga cgctgcacgg cctcaaccag gccaccgcca cctccgacct 240

cttcggcgac aaccaggggt accgcgagct gtcggagctc gccgagcagg cggccaagcg 300

cgccgaggtg gccaggctca gggagctgca cagctcaag ggacacgtcg agtccgtcgt 360

caagctcaag ggcctcgaca ttgacaccat tcagcagagc tacaccgtgt aaactcgact 420

cagttt 426

<210> 4217

<211> 400
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F5

<400> 4217

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tcgtcgtcgt cgtctcgttc tgtggctcgt gatatccgcg caaacaatgc tagttgccgc 120
cgcgggccggc gccaaagcggc aggcgccggt gatgttcgtg ttcggcgact cgacgctgga 180
cgtcgggaac aacaacttcc tgtcgggggc ggccgtcccc agggccaaca agccccacta 240
cggcgtcgac ttccccggcg gccatcccac cggaaggttc agcaatggcg acaacacggc 300
tgacttcgtc gcgaagagca tgggggtgaa gagtagccct ccgccgtatc tgctcgttgc 360
acccaacggc tccagccctc tgctcgcgca gactgctctc 400

<210> 4218
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F6

<400> 4218

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agaggtgact cctcgatcat gtccagtcac accaccacca tctccagttg agacactagt 120
tccaccatca cagtcacgc caccggaaga agcagttagc tcaacacctc aagcaccagt 180
gtcgtcatct ccacgagctc ctgtacgctc agtacctcca ctgaagtcct cgccgcctcg 240
agtagtagag agcgcaccac caccgacaat atagtcacac cttccactgg ctccactgag 300
ctcaccagct catgtatgag aagacttctc gcatgacttg cagcagtcac ctcagcagct 360
ccgtcatcta cgtcatcagt accagtagc 389

<210> 4219
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F7

<400> 4219

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agtcaagcaa catactgctc ttgaccatg atgttgcgaa gatcggggac ttcgacatct 120

caaaccaggc ccctgacatg gctgcgcgcc tccactctac tcgcgttctt ggcacctttg 180

gctaccatgc accagaatat gccatgactg gacagcttag cacgaagagt gatgtctaca 240

gctttggagt tgtgctgcct ggagctttta accggtcgca agccagttga ccacacactg 300

ccccgtggcc agcagagcct tgtgacatgg gctacaccga ggcttagtga agacaagggtg 360

aggcaatgcg tcgatccaag gctcggagac gaataccctc caaaggctg 409

<210> 4220

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-F8

<400> 4220

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acagccagct cgcgaaaata atgaagagcc gcagcatggc atcatcggcc gcgctcttgg 120

tgctagccct cgcgctagtg gcggaacaccg cccacaggt agcggaggca aagaagaaga 180

gagcggcgga gagcggcgag gcggcggagg cgaagaagat ccaggacgac ttctgctcga 240

cgctgtgcga gggcaagaag gggacggacc tggtcgtgtg caaggagtcc tgcgcgctct 300

cccagcagtc caacctggtg ctgtacggca ggatccagtg caagggcaaa tgcaccgagc 360

agaagggcat cacggcgccg gccatgaagg tctgtcagga ggagtgcgac aaggcgtacg 420

tggtgaaggc ggccg 435

<210> 4221

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-G10

<400> 4221

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gtcttccatg gcctcctcgt agtagaatag ttctatctca ccgcaacaac tcctcattac 120
atccttttatg agaggctgat cgattggtag atacgtactc ggggtggagca gagcaacgag 180
agacatggcg acgacgacgc gtgttgccgc cgccgccacc ggcgtgctgc tggtcctgtc 240
ggcgttggcg accctggcgc gggccgagga cccgtacctg ttcttcgagt ggaagggtgac 300
gtacgggatc aagtccctgc tgggcgtgcc ccagaaggtc atcctcatca acggcgagtt 360
ccccggcccc aggatcaact gctcctccaa caacaacatc gtcgtcaacg tcttcaacca 420
gct 423

<210> 4222
<211> 365
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-G11

<400> 4222

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ctgaacacac gcatggtgcg cataggcgag gccaaaggcca ccgcgaggga tcgtgtggtc 120
agctgggatg gcaatgcgat gcacctccgc cgcgctgctc gtgctggcgc tcgtcgccac 180
cgtagtgcg cgggaggacc cctaccactt cttcgagtgg aacgtgacgt atgggacgaa 240
cagcatcatg gggactccgc agaaccgtga ttctcatcaa tgatctgttc ctcggacgta 300
acatcaactg cacattcaat aacaagatcg tcatcaatgt cttcaatatg ctcgagcaac 360
tgctc 365

<210> 4223
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-G12

<400> 4223

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aaggaaaccg aagccccgat gacaagcttc ttcaggagcg cgcgcctccc gcagcagcgc 120
gtcgtcgagg gcgtccccctt cccggcggtg ctcgtcccga gcgctcgtgc gggctcctgc 180

gccggcgggg tcgacaagtt cctggcgggc gtgcgctgcg agagggcgtc ccggctggag 240
 ccgctggtgc gggacgcggg ggcctgctg ctgcgaggt tccccgcgac gacggccgcc 300
 gacttcgacc gcaccgtcga cgccttcggg tacgaggagc tgccaatcgt cggcagcgtc 360
 gcgccgcgga ccaacgtcgt gggccgggtg ttcaccgcca acgactcgcc gcccga 416

<210> 4224

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-G2

<400> 4224

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 caccaccca tcgaggttgg ggccgccagc aggttcagcc gttcctgttc ttgataaaac 120
 gagagaagga tggcagtgtt tcaggagct gtcctagtct tgtttctcct cctcgtcgca 180
 tcagatgtgg gaaccatcga tgccaaaatg ggagtagcca tgcacatgca tgccttgata 240
 atggagaaaag cgacacagca tgacacggcg aagaacgagg agaatatcac ggataaggaa 300
 cagagtcaat gcttatcgcc gagtctccaa ttcgagggt tctgcttcaa cagtgcagaa 360
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<210> 4225

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-G3

<400> 4225

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 gagctggaga tggaggatgg agaggggaca aggtttccgg ggccgagtc gagacggacc 120
 ccgcgccggc acgatccggt ggatgaagtg catcacacct tgagggacgc cccttgagca 180
 gcagtttgtg ctgcaaattc tatatagctc tgcgcagca tggcctcggg gggcgtggca 240
 cgcgcttctt tgggatttca gaatggcaca agttctagca gtgaccaga tcgtcatccc 300
 aacgagttgg gcagtatgag cattccggac gacaaggacg ttgacgatat tgtagtcaat 360

ggcaatgggg cggaacctgg gcatatcata gtgaccagca ttgatgggag aaatgggcaa 420

<210> 4226

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-002-Q1-E1-G4

<400> 4226

cggtcgacc cacacgtccg gcaccgcgaa ggccaagatg ctaaagggca tcggcgtggt 60

cggaatgatc gtggtgaccc cggagttgtt cggtcggta atcatcccga ggccgcacgc 120

catcccgacg gtgcaagtct ctaacgcggc ggggcagaag atcaaggcct acatccacaa 180

ggcgcgggac ccgacggcga cgttcgtctt caaaggggca gcgttcaaca cccaaggctc 240

gccgatggtg gcgcccttct cctcgcgggg cccgaacagg aggagccgtg ggattctgaa 300

acccgacatc atcggccccg ggggtgaacat catcgccggc gtgccctcga tcgangacgt 360

ggacctgctg cgcaacgcgg aggtgcccac gttcgacatc aagtccggca cgtccatggc 420

cgcgccgca 429

<210> 4227

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-G5

<400> 4227

ggtagcccta caggtactag tccggaatgc ccgggtcgac ccacacgtcc ggccgaaggc 60

ctcgtgcctt ctcttctctc ctggcatgga ggaagtagct gtttcgccta tgatcgttgc 120

cgccgtagtg ctggacaaca atggcgctga cgcggtctcc tgcactgcca tccctagcgt 180

aacaataagc ctagaggaga aagaaaatat caatggggat gttcccacga tcacctcggc 240

cgcaagcaac gaggaggagg cgttgttcag tgtcggagaa tccaccaagg acgatggcca 300

tcgcttgacg atggaatgct cactcccgct ctctccagt agcccttcca ctcgcaagaa 360

gcgcggggcg ttcagcctct tcagggcgat gttcctgtcc ttcggccgga gcgacgacag 420

catgaagaag acagacgacg acaccacgag cccaag 457

<223> Clone ID: LIB148-002-Q1-E1-G8

<400> 4230

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ccatcaacaa tcgccgagag cgatcgagag ataaataaag atgaagaaag tggcatcatc 120
gtcagccgtt ctcttcgtgc tagccctgac gctagtttgt gccccgctga tagcagaggc 180
aaagaagaag agagtcgccg ccgccgccgc cgaggagaag aaggtgcagg acaacttctg 240
ctcgacgctg tgcgagggca ggaaggggat ggacctggtg gtgtgcaagg agtcctgcga 300
cctctcacag cgctccaacc tgggtgctgta cggccggatc cagtgcagg gcaagtgcac 360
cgagcagaag ggcataccg cgccgcagat gaaggtgtgc caagaggcgt gcgacaacga 420
ctacgtgggtc aaggcggctg 440

<210> 4231

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-G9

<400> 4231

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ggaactcctg caccaagaag tacgactgca cgatacttcc caactcgctg gtgatggact 120
tcgtgaacaa cggggagggtg tccgggatca cgctgctcaa ctccaacttc ttccacatga 180
acatgtacca gtgcgtgaac atgctgatca gcgacatgac cgtgacggcg cccggggaca 240
tccccaacac ggatggcatc gacatgggag actcatcagg gatcaccatc atcaacaccg 300
tcattggcgt cggctacgac tgcattctca tcggccctga gacctccaac gtgaacatca 360
ctggcgtgac ctgcggcgcc tgccacagca tcagcatcgg cag 403

<210> 4232

<211> 188

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-H1

<400> 4232

tccggatatc ccgggtcgac ccacacgtcc gcaagtgccg gcctcgccat tagatctcca	60
agcgaatcat gtcgagatat caccatcggg ccaggctctt gcagaaacga ggaaaaaata	120
catgtcatct cgctgggtta gggcggctgt gtatccgatg ttctcgacga caggggtagt	180
gctgggga	188

<210> 4233
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-002-Q1-E1-H11

 <400> 4233

ccacgcgtcc gggaggtggc cgtgaagcag ctcaaggccg ggagcgggca gggcgagcgc	60
gagttccagg ccgaggtgga gatcatcagc cgagtcacc accgccacct cgtctccctc	120
gtaggctact gtatcgccgg ctctcccag cgctgcttg tctacgagtt cgtgcccac	180
aacaccctcg agcaccacct ccacgggaag ggtgtgccg tgatggcctg gccggcgagg	240
cttgccatcg cctcggctc cgccaagggc ttggcttacc tgcacgaaga ttgccacccc	300
aggatcatcc accgtgacat caaggcagcc aacatccttc tggacgagaa ttctgaggct	360
aaggtcncgg gtttcggact ttgccaagct gacacagaca ccaacacgca cgtctccacg	420
cg	422

<210> 4234
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-002-Q1-E1-H12

 <400> 4234

taccaggccg gaattcccgg gtagaccac gcgtccgcaa ggttgctatc atccaccaca	60
aggcaagagc tgcagacgtc aatccagaat acgaggctgc agggatcgat acctggccag	120
aagatgaggg agcaatcgta gagtcacag acgacgcaag gcaactggacg tcagacaacg	180
ttgcaatgtc caagtctaga atgtcagctc attggtcaga acagatcggc tgcacagaac	240

gctagattga tatcagcaca aagacagctc atccattcct cagaattcaa ggcctctcgt 300
 ggagtacaac agtatacagt acaaagaagg atatccagt atgacagaca agtaatgcat 360
 agctatcaca aatttgctgg caacgacgat gaagacgata gtgacatgga aactgatttt 420
 gctancatac 430

<210> 4235
 <211> 336
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-H2

<400> 4235

tccggatatc ccgggtcgac ccacgcgtcc ggggcaaaca tgcagtagtt gagaaggtgg 60
 aggaggacaa ggaggaggca ctaacagtgg cggcgaaaca tgagccagca ggcattcattg 120
 agcctcatca gattgctagt gaggtgacca cttcgggagt ggcggtcgtc gttgtcgaac 180
 ctgagaacag agtcgacgag gaagttgtgg agaagaccgt catcgagaag gagatgccat 240
 cagcagtcca tgcagacgaa aatattgcc ccatcaaggt ggcaaccgag cccaggacag 300
 tattgaagaa cgacaccgtg gaggagatat agatgg 336

<210> 4236
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-H3

<400> 4236

ccggatatgc cgggtgaccc acgagtcgcg ccgggtcccgg agctgggtcct tcgtggagcg 60
 gcccggcgcg ctgctggtga tcgccttcct ggcggcgag ctggtggcga cgtgcatcgc 120
 cgtgtacgcc aactgggagt tctgcaagat gcagggcatc ggctggggct ggggcggcgc 180
 catctgggcg ttcagcgtcg tcacctactt cccgctgtac gtgctcaagt tcggcatccg 240
 ctacgcgtc tccggcaagg cctgggagaa catcagcaac aagacgggct tcaccaggcg 300
 taccgactac tgcaaggggg agcgagacgc gcagtgggcc acgggacaaa ggacgctgca 360
 cg 362

<210> 4237
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-H4

<400> 4237

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ttcattctga tttttgtcag atgttcgaga tggtgacttt ggcagcaaac tatctggcag 120
aagatcagaa tggttactag catcctctat tggaagcaaa tcacacggac cgtgacctaa 180
actaatttaa ctatgaagtg tgaccaatag aggagatata agtgggggtca caatggagga 240
gaccaaagcg gggagatcga agacaaagga ggcctcctgt gcatgggttg tttctgtttt 300
cccctttcga gttctttctt gcgacaatct tgggtcgcac aaatgggtgt tgtaagtaat 360
gatctgtagc tacaaatgta tgatggggga gtgattgctt cccatacatg ttccttcctg 420
ggctatgt 428

<210> 4238
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-002-Q1-E1-H5

<400> 4238

ccacacgtcc gcgagtagat acctcgcat ggctggagcc tgtgtagtgc tcagcgtcct 60
cgcagctgcc gtcgcggtcc aggtagcgcg gccgcgatct gcacgcgggg gagccgcgcg 120
agttgcgcgg catcgcatga acacactgtc acccgacctg tgcaccagaa ctgcggagaa 180
tcacgtcagt aggtataacg tggtagatgc tgtgacggtg ctagaaatgc aagtggacgc 240
ttacaagata cgtgtcaagg ccgttcggat gtcgcgcaac gatgagggtca aactgcagc 300
gacgcccgcg gtgctgatgg agcagaagct ctgcagtacc tactatctgg acgtcgccga 360
caagctcggg acctgcaagc gctccatcag tttccg 396

<210> 4239
<211> 419

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-H6

 <400> 4239

 ccacacgtcc gggacgtcac ggacatcaac gtcaaggatt gcactcttaa gaagacgatg 60
 ttcggcgtcc gcatcaaggc gtacgaggac gccgcctccg tgctcaccgt ctccaagatc 120
 cactacgaga atatcaagat ggaggactca gccaacccca tcttcacgca catgaagtac 180
 tgccccaaca agttgtgtac tgccaacggc gcctccaagg tcaccgtcaa ggatgtcacc 240
 ttcaagaaca tcaccggcac ctctccacc ccggaggccg ttagcctgct ctgcactgcc 300
 aaggtcccat gcaccggcgt caccatggat gacgtcaacg tcgagtatag cgggaccagc 360
 aacaagacca tggctatatg cacgaacgcc aacggcagca ccaatggttg cctcaagga 419

<210> 4240
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-H7

 <400> 4240

 ccacacgtcc ggacggacgg tccgccgggc ggcggcgccg ctaggtaagt aggtagctag 60
 agcgtgctgc caaccacgac gtagcacatg caatggcact cgcggccgtg gcgctgccgt 120
 cgtcctcgat cgtcggcctg gtgtctagct gcacggaacc gcagccatgc agacgatctc 180
 gaccgtacgc cgtgtgtagc cggccccggc caccgcccac tgctgccaac tgcccagtga 240
 tgacgacccg gccatgtccg ccgtacgcac ggtcctgcct ctcgatcgta cgccgtgagc 300
 aacaggagtt ctgtccggcg ctggaggctg gtccttgtcc tggctagagc tagcccgccc 360
 gccggtcaca cggatcggat ctctccatcc actcccagct gt 402

<210> 4241
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-002-Q1-E1-H8

 <400> 4241

ccacacgtcc gcggaacggt ggggcaagaa catgggggttc cacagcacgg ccggcgcgga 60
 gcggcaccag gcggtggcgc tccgggtgca gggggacctc gcggcggttct acaactgccg 120
 gttcgacgcg ttccaggaca cgctgtacgt gcacgcgcgg cggcagttct tccgcaactg 180
 cgtgggtctcc ggcaccatcg acttcattctt cggcaactcg gcggcggtgt tccagaactg 240
 cctcatcatc acgcggcggc ccatggacaa ccagcagaac tcggtgactg cgcacggggcg 300
 caccgacccc aacatgaagt ccgggctcgt catccagaac tgccgcctgg tgcccgaacca 360
 gaagctgttc ccggaccgct caagatcccc tcgtacctgg gccgcccctg gaaggag 417

<210> 4242

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A11

<400> 4242

cccgggtcga ccacgcgctc catgtctaac atcactacaa aataacaacg aagctcacca 60
 acagccagct cgcgaaaata atgaagagcc gcagcatggc atcatcggcc gcgctcttgg 120
 tgctagccct cgcgctagtg gcggccaccg cccacaggt agcggaggca aagaagaaga 180
 gagcggcgga gagcggcgag gcggcgagg cgaagaagat ccaggacgac ttctgctcga 240
 cgctgtgcga gggcaagaag gggacggacc tggtcgtgtg caaggagtcc tgcgcgctct 300
 cccagcagtc caacctggtg ctgtacggca ggatccagt caagggcaag tgcaccgagc 360
 agaagggcat cacggcgccg gccatg 386

<210> 4243

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A2

<400> 4243

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 tgtgatgaca aaaattgtgg caatgcagat tatgttgatg atcttgatga catttcccaa 120
 gaagatacct gtggtagttc tgatcctggc aatggaattg cggaagataa atttgaggtc 180

aatggatctg ctcaaataaa gcgtccaaaa tttcaaaagg gtgtcttacg tacaaactgt 240
 atagattgtt tggatcgac aaatgttgct caatatgcct atggcctagc tgctttagga 300
 caccagttac atgcacttgg ttctgtagaa tctccagaag ttcattctaga ctctcctttg 360
 tctcgacatt tgatgcattt ttatgaacgc atgggtgaca cacttgcttt 410

<210> 4244
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A7

<400> 4244

ccgggccgac ccacgcgtcc acaaaaaacaa ggacggtagt ttgtcacttg aagagctgaa 60
 ggaggggttc cggataaacg atcatcctgt tccagaggaa gagataaaga tgttgttaca 120
 agcgggcgat atacatggaa ctgacacatt agattgtgag gaatttgtga cagtcttgct 180
 tcacattaaa aagatgagta atgacgagta tctacctaaa gctttcgagt tcttcgacaa 240
 agacgggaat ggttttattg aaatgtccga gttaatggag actctaagtg atggtgaaact 300
 aaagcctgat gagcaattgg ttaacgacat tattcaagag gttgacaagg ataaggatgg 360
 tcgcatcagt taccagagt ttgaattgat gatgaaaa 398

<210> 4245
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-A8

<400> 4245

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 cccagggagc ggacgcgggc gggccggcgg gcggccatgg acgtggactg cgtctcgtg 120
 cccgacgcc cggcgggcga cgtggatggc ggcgccgcc ggccgtggcc caaggacgtg 180
 accaacagag gcgtccacga gctgctggag tgccccgtgt gcaccaactc catgttcccg 240
 ccgatccacc agtgccccaa tggacacacg ctgtgttcca catgcaaggc cagagtacac 300
 aaccgttgcc ctacctgcaa gcaagagctg ggcgacatca agtgcctggc gctggagaaa 360

gtcgccgagt cgatggagct cccctgc

387

<210> 4246

<211> 460

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-B10

<400> 4246

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cctccagatc gcgcaggaga aggccggcat cgtgcccata tcctatcgca ggggtggcgtg 120

cgcaagcag ggcggcatcc ggtacacat caccgggaac aagtacttca acatgggtgac 180

gatcaccaac gtgggcggcg ccggcgacat cgcggcgggtg tcggtgaagg ggagcaagcg 240

cgtcaagtgg acggagatga aacgcaactg ggggcaagtg tggcagaccg gggaagacct 300

cacctgcgag tcgctgacgt tccgggtgat gactagcgac caccgcaagg ccacctcatg 360

gcacgttctc cccgctgact gggagttcgg cgtcacgtac caggcgtcca agaacttcta 420

agtagccact ttccctcttc ttcttcaacc tgcatgcccg 460

<210> 4247

<211> 397

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-003-Q1-E1-B2

<400> 4247

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tggggttcca caacacggac ggcgcggagc ggcacatgc ggtggcgctc cgggtgcagg 180

gggacctcgc ggtgttctac aactgccggt tcgacgcgtt ccaggacacg ctgtacgtgc 240

acgcacggcg gcagttcttc cgcaactgcc tggctctccg taccatcgac ttcatcttcg 300

gcaactcggc ggcggtgttc cagaactgcc tcatcatcac cctgcgtgcc atcgtaacc 360

agcagaactc ggtgcacatg cacgggcgca ccgacct 397

<210> 4248
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-B4

<400> 4248

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acgacgcgcc gccacagcca catggcggac gacgccgtcg ccgccggagc ggccgtttgc 120
tgcgcagggc cggcctcgct gtcttctagc aggaagcagc agcagcagcc cgacgacgcc 180
ggctgcggca gcagcagcag cgacgaccac taccagcacg acgtgatcat gctgaggcgg 240
acgaggagcg ggccgggcatt cccgccgccg atctccgtga tcggcaaggg cgggcggccg 300
tggctctgcc tgcggggcgca ccgcgagggg ggacgcctcg tgctgcggca gatgcgcctg 360
ccgtcgcagg agctgctgca gccctgcaag 390

<210> 4249
<211> 257
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-003-Q1-E1-B5

<400> 4249

ccgggccgac ccacgcgtca acctggatct aaccctacg aagcggacga ggatagccat 60
tgccgaaatg cagcggggcc ctctccggcg gtctctgcc gctgggtcgg ngcaagacgc 120
ccgatctgtt ggtgctccgc gaaaccaac atttggcggg cccctacctt gatgttggtg 180
gaatcctgaa caacgaaagc tcctgtcccg gttccccggg ggctcctaaca acttcgctcg 240
gtccgctcca atgcca 257

<210> 4250
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-B6

<400> 4250

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 cggcgcgcg agagggagga agggcagacg cagacgcaga cgggcgaaca agatgagggga 120
 gatcatcagc atccacatcg gccaggccgg gatccaggtc ggcaacgcct gctgggagct 180
 ctactgcctc gagcacggca tcgagcacga tggcaccatg cccagtgatt cctcggttgg 240
 cgtcgcacat gatgccttca acacgttctt cagcgagact ggttccggca agcatgtgcc 300
 cagggccatc ttcgtcgacc ttgagccac tgtcatcgac gaggttcgca ctggctcgta 360
 ccgccagct 369

<210> 4251
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-003-Q1-E1-B7
 <400> 4251

attcccgggc cgaccacgc gtcaaaagca cctcctcttc ccccgccggg caacaactca 60
 gccgccgcaa ccgccacatc agccatgggc gcctgcgcaa ccaagcccaa gacgcttgag 120
 gggcaggccc cagctgagggc cgccgtctcc acaccaagg ttgcgcccga ggccactcca 180
 atctccgttg aggttgccggc tgatgaacag gtagctgaga aggtggtggt ggaggagccg 240
 gctgcggcgg ccgacgttga gcatcagaag gctaataagg tgctcgctcc agaggcggcc 300
 gtcgccgagc ccgaccacaa ggaggaggaa gccgtggaga agaccgtcgt cgaggaggag 360
 aagccagcgg cagcagccca tgcagaggaa aaggtcgcca ccgccgccga g 411

<210> 4252
 <211> 213
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-003-Q1-E1-B8
 <400> 4252

aacacctata gtgagtcgta ttaaccggga ggccactggc taaggcaaca caaaccgcag 60
 atcaccgata tgcacgtacg gcagccaccg aagcacacgg gcggagaacg actcggatat 120
 catcagcatc cacatcggca aggccggggg ccaggccagc acatcctgcg tggaggtcga 180

ctgcctcgag cagggcatcg agcacgatgg gtc

213

<210> 4253

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C1

<400> 4253

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ggactatcat gagcaaggta gcagatgcat ccaaggagga gatccactcc atcgagtcgg 120

tgaaggaggc aaatgcacgg cgggctcaga aaatcaacag ccgcgttggt cgctactaca 180

aagcagcagg agccacagaa ggcgcggcgc cggcgccggc gccagaagca acctgatcga 240

ggagaacgtt agaacagtag ctcaccctcc cgagagtatg ggttgaaaat ctttggcgaa 300

ttgatgtctc gatgcaaatt aaacaggcat gccatctttg tgtaaacaga aattttacac 360

actaagttcc actccctata ctactaccat aatttttagta atgtaaatac tttgaaagaa 420

tgcttaaata taa 433

<210> 4254

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C4

<400> 4254

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ctctcttcat tagcacgcta acttgtaatc tgcaggatct aagcaaagac ttgatttagt 120

tatggacgga ttggtaggcc tcttgaaagt tcgcgtggtc cggggtatca accttgcccta 180

ccgcgacgca agaggcagcg atccaaactg aagacaagcg tgaagaagag atccgtgaac 240

cccatatggc aagaggagct aactctgacc gtcacagatc ccagccaacc actgaagctg 300

gaggtgttcg acaaggacac cttcagcaga gacgacccca tgggagacgc ggaggtggac 360

gtggcgccac tgatggaggc ggtgagcatg 390

<210> 4255
 <211> 334
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-C7

 <400> 4255

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 tcgctggccc ataaatatat atctatctat cgccatcgag caattataat ctcacagaat 120
 aataaacatc atggggcaag cctcacggct cgtcctcctc gccgtcgtgg cgctgctgtc 180
 cgccggcctc ctcccgagg cgctgggtaa gggtangga ggcaggggac acgggtggcgc 240
 cgtaaccccg caggctgcgc gcatctgtc tcggcaccgc ttcccggaag ttttcacgtt 300
 caacggcggg ccggaagcgt tcaagttacc ggtc 334

<210> 4256
 <211> 426
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-D8

 <400> 4256

 ggtctagaat tcccgggccg acccagcgt ccaagccccg tccagcccc aactccagca 60
 ctccagaagc tccccctgat ccgacgtcgt ggtggccgac ggctggatcc ctccaccccc 120
 gcgcgcagat gcccctcgcg ccgcggtcct cctcgtcggc gaaccggcac aggggaagcac 180
 caccgcctcc gacgcctaga aattctggag cgtagcaggg taccgtaccg cgcgtcggcg 240
 agctctgttt gcggcgtttg gtactgaaga tgaagaagtc cgactgatgg tttcttataa 300
 taatatgcat ccaagacatc gtacgttaca gtctcccatg atctgtgtat gtaacgtgga 360
 tatacaattg aatatgtgga ggactgtgcg acatgcgttg aagtcggagg gaggattgta 420
 tgctgt 426

<210> 4257
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-D9

<400> 4257

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gaagtaacac ttctccgtga ggcctgagcc cctcgccgcg gtgagccaag ccggcgccacg 120
tcgccccggg gctcacgctc accaccgagc cccaaccaat taataatata tatatatagc 180
taggatcgat cgtcagtaaa atggcaggct ccgcccgtct gaggagcccc ctgtccgtcc 240
tcctctacat cctcgccgcc gtgcccgcga ccgcccgggc gacgccgacc gacgccgcga 300
tcgacgaggc gtacgcgcac ctcgtcaacc tcaccgctaa ccaggagtac tgggcggagc 360
gcgcgggagc ggcgcacgcg tacaaccgcg cggcgtagca gaccgacccc gtggccgtcg 420
tgcagcgct 429

<210> 4258

<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-E10

<400> 4258

gggtctagacc tcccgggtcg acccacgcgt caagtaggtg cattgcttcg gtgggtccacc 60
atggcgccagc gagcgggtggc cacgatgacg actaataagc ccctcctcct cctcgccctg 120
gcgtccgcgc tccttgggtgc ggcgcgggcc gccgcgaacg cggccggcggt ggcgttcagc 180
aactgggtgg cgatgaacca gcagagctac gcgctgtacg cgcagaagtc cgtcgggggac 240
gggggcaagg agcccctgga caagaagctg tcggaggcgg acaagaagaa ggtcacgtac 300
gtgggtggacc ccagcggcaa cggcgactac accagcatca ccgcggcgct ggaggatata 360
ccggtgagca acaccaagcg cgtgatcctg gatctcaagc gcggcgctca gttccgccag 420
aagctgttcc tgaacatcag caagccgttc atc 453

<210> 4259

<211> 456

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-E11

<400> 4259

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 aggcgacccc gcgccggctg gcggagctgt tcgtgaacat cgcgcccgag aagggatccg 120
 ggatggccac gttcgtgcac gggaagtaca acaacgcaa ggacagcacc gtgttcaagt 180
 gctacgacag ctgctcggac gacgtcggag aggcgcgtgc ccacctcaac ggctcgtcc 240
 gggagcccac cgacgccaag ttcttgagc tcaagtcgtg gctctctcc acgctcggcg 300
 gcacctccac ctgcgaggac gctgcaagg acctgccaa gaacggcgac aaggacgacg 360
 tcgtcaactt cagcctcgac ttcgagaagc tgcagcgcgt cacgctggac ctcacaccg 420
 aggcacccg attcatgttc gcaggcatcg ccctgc 456

<210> 4260
 <211> 449
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-E4

<400> 4260

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 atgaagagcc gcagcatggc atcatcggcc gcgctcttgg tgctagccct cgcgctagt 120
 gcggccaccg cccacaggt agcggaggca aagaagaaga gagcggcgga gagcggcgag 180
 gcggcggagg cgaagaagat ccaggacgac ttctgctcga cgctgtgcga gggcaagaag 240
 gggacggacc tggtcgtgtg caaggagtcc tgcgcgtct cncagcagtc caacctggtg 300
 ctgtacggca ggatccagtg caagggaag tgcaccgaac aagaaggcat cancgcgccg 360
 gccatgaagg tctgccanga ggagtgcgac aaggcgtacg tggatgaagg gcccgaggtc 420
 accaaggcct gcagcgtcac ctgcgcaa 449

<210> 4261
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-008-Q1-E1-E6
 <400> 4261

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acgatgacga ctaataagcc cctcctcctc ctgcacctgg cgtccgcgct ccttggtgcg 120
gcgccggccg ccgcgaacgc gcccgggcggg gcgttcagca actgggtggc gatgaaccag 180
cagagctacg cgctgtacgc gcagaagtcc gtcggggacg ggggcaagga gcccttgac 240
aagaagctgt cggaggcgga gaagaagaag gtcacgtacg tgggtggacc cagcggcaag 300
ggcgactaca ccaacatcac cgcggcgtg gaggatatcc cggtgagcaa caccaagcgc 360
gtgatcctgg atctcaagcc cggcgtcag ttccgcgaga agctgttcct gaacatcagc 420
aagccgttca tcacgt 436

<210> 4262
<211> 375
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-008-Q1-E1-E7
<400> 4262

ccacgcgtcc agtaccatta aggatgaagg tttctcttcc ttgtggaggg gtaacactgc 60
taatgttatt cgttacttcc ctactcaggc tttgaacttt gcatttaagg actacttcaa 120
gaggttgttc aacttcaaga aggataggga tggctattgg aagtggtttg ctggcaacct 180
ggcctctggt ggtgctgctg gtgcttctc tttgtttttt gtgtactccc tggactacgc 240
gagaacaagg ttggctaata acgcgaaggc tgccaaggga ggaggtgaaa ggcagttcaa 300
tggtgttgc catgtctacc gcaggacact caagtctgat ggtattgctg gggctttacc 360
gtggatttaa catct 375

<210> 4263
<211> 433
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-008-Q1-E1-E8
<400> 4263

ccacgcgtcc acacggtcga cgaaccgtgg tggtggagga tggcgtgcaa tgggacaggg 60
tgagggcacc gcctgttgac acccttgccg atgacctga cacctctgac tgctgcatg 120

agctccggcc cggcgaccac atcgagattc agtggagaag gaacaaagaa ttcccatacg 180
gctggtggta tggagttggt gggcacttgg agtcatgtga tggaagcgaa cacttttgtc 240
ggtgccatct tagtgatacc gtggtgctgg agtttaatca gtacacgccg ggctcaaggt 300
ggaggcaagc gttggtgaag cggaaggagc ataaggagga gggcaacgag ggcgacgggt 360
tctacggcgg cataaggaag ctccgcgga aggatgacat ctccaagtgg aggcagctgt 420
ggccaacaga cgt 433

<210> 4264
<211> 460
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-008-Q1-E1-E9

<400> 4264

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acgatcgaac gagcacaggc acgcacgcac catggcccgc gctctcgccc tcgcctcctt 120
cctcctcgtc gcctccgcca ccgtggcttt cgccgaggag gccccggcag cctcgccgaa 180
gcattcggcc tccacgccgt caaaggcgcc cagcagttcg cccgacaagt ccgagaaggc 240
ccccacggcg tcgggtgaga atgctgcaga gacgccgaag gcaaccccg ccaaggcccc 300
ggcgggcgcc tccaagtcag aggcacgcgc ttccgaggcg cccgactccg ggtccagcgc 360
tgcgtcacct actagcgaga ggcgcgcgtc agagaaggcc cccgcccgtg cccccaagga 420
ctcgtcggcc agcccttcg cgtcnccgtc cgaagatgaa 460

<210> 4265
<211> 412
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-008-Q1-E1-F1

<400> 4265

tacggctcca gaattccaag gtcgaccac gcgtccagtc gtcgagcca tcctgctcga 60
ggtcgaccag atctaccacc tcgcctgccc cgcgtcnccc gtccactaca aatacaacct 120

<210> 4268
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-F12

<400> 4268

accggtctag aattcccggg cggacccacg cgtccatccg atccatcaac aatcgccgag 60
 agcgatcgag agataaataa agatgaagaa agtggcatca tcgtcagccg ttctcttcgt 120
 gctagccctg acgctagttt gtgccccgct gatagcagag gcaaagaaga agagagtcgc 180
 cgccgccgcc gccgaggaga agaaggtgca ggataacttc tgctcgacgc tgtgcgaggg 240
 caggaagggg atggacctgg tgggtgtgcaa ggagtctgc gacctctcac agcgctccaa 300
 cctggtgctg tacggccgga tccagtgcaa gggcaagtgc accgagcaga agggcatcac 360
 cgcgccgcaa gatgaagtgt gccaaagggc gtgcgacaaa gactacgtgg tcaaggcggc 420
 tgaaggtcac aaggcct 437

<210> 4269
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-F2

<400> 4269

attcctaggt cgacccgccc gtccacggcg ttcaccgagt tcaagaccga tgacatggcc 60
 aacatcatga aggacttcga cgagccaggg cacctcgcg cgacatgcct gttcctcggg 120
 cctaacaagt acatggtcac ccaacgcgag cctggtgccg tcatccgtgg caagaatgga 180
 tcaggaagca tcaccgtgaa gaagacaggg catgcactcg tggttggtat ctacgatgag 240
 ccgatgacgc ctgcgagtg caccatggtg gtggaaaagc tgtgcgacta cctggcttaa 300
 caagggatgt aactactacg tagcagctgg catgcatgtc gacgaccatg gttttcaatt 360
 tcgacttcca ataatactga caacaaagca ataggcttcc tcccggcgta attgctttgg 420
 ctcttctcct ccacgcgata ggatatcta 449

<210> 4270
 <211> 455
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-F3

<400> 4270

tacgggtcaa gaattccaag gccgaccac gcgtccacta tcaccattaa ttcattcctct 60
 gaccaaaggc tacatgggtcc tctaccgcaa ctatttctgc aaacatcgag ctgatctcgg 120
 agcccggagc tgcaatctga caacagtgcg tgctcgcaaca ggagatcggg tcaccggaat 180
 cgatagaaaag gacgattaga ctatggtgcc ccgaattacc aatcgaatta cacgccacag 240
 atcgcggtctt gggatttggg acgtccccaa atcagaacct cggacttagc ggcacagggc 300
 cagggatgaa aacggtcgga aacgggtattt attcggtaat cagtttttta gtcgtttttc 360
 tttgattgcg aataaataga atatagaatc tatcatacaa atttgtattc ctgtttttaa 420
 cattcagttt gtaaagattc ataaaagata aacct 455

<210> 4271
 <211> 286
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-F4

<400> 4271

accaacgcat gcaagtggaa ggcagcaaca accgcctgat gggcctccaa ctcagcagca 60
 gccacagcag ccaattcaga actgaagtcc tgtcaaaatg ttgggtattg gtactgctcc 120
 aactgctcgg caggagaatg caaccccggtg ggtcaccagc cttccgtatt tcttaatttg 180
 tggttaacag taaaaacttt gttgtattgc gtatcaacgt ttgaagaaaa accgtgagat 240
 ataccggatg taaaaaaaaa aaaaaaaggc gggccgctcc agagga 286

<210> 4272
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-F5

<400> 4272

ggtctaggac tcccgggccc acccacgcgt ccagctggtc ctcgaggcca tggattgcgt 60
 cctcatcgag atcttccagg tgtacggcga gatatgcacc ggcatcgcg gggttcctcat 120
 cagcggcggt cagggcggac cggcgatgct gacgacccgc aaggaggtca tggcggcagg 180
 ggtgaagggtg ctctggcggg cggcggagca gagcgctcag ctctcgtcct acttcgacct 240
 gtgccgcgag ctcggcgtgg ccaacgcgcg caagctcccg acatcattag ttcgcttgaa 300
 agacgacgac gtccgggacc tcgagcggat cctcatgagt gagagtgaca tccagaacga 360
 aagcgggtgag gaggcggagg cggaggcaga ggcagaggca gaggcggcgg cggacgtgaa 420
 ggacgcgggg tcaacgtcga cgaacact 448

<210> 4273
 <211> 68
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-F6

<400> 4273

tctcgttgtc tgttgcaatt ctctatagtg agtcgtatta cttgtggtgg ttcctcctgt 60
 ggctgtcc 68

<210> 4274
 <211> 461
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-F8

<400> 4274

ccggtcagga attccccggc cgaccacgc gtccacagat tgctgtcagc tctaaagggtt 60
 ttctcgctgc tgcagatgat agtggggatg ttaagattgt caataccatt cagaaatgcc 120
 tgtataaaag attaaggga gcccacacaa gtatttgag cagcgtgcaa ttcattcctt 180
 ggagaccttg gacagcaatt actggggggc ttgactcaaa gctggctgca tgggatttct 240
 ccaaaggacg aacactgttt tctattgatt atggatcacc tgaattgcaa aacggcagtt 300
 cttccggtag tgcagggcaa tgtttcaacc ctgcttttgt tcattccgta gcagtttctg 360
 aagaggatat tttgggaggg ctctacaagg tttgtgctgt tgcaaggggg gatggtgctg 420

ttgatgtggt tgatcttgag tatgaactgg cccctgcgaa a 461

<210> 4275
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-F9

<400> 4275

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cggccgagca ccatgcgagg aaataacatg ccgcggcaca cgtcgccgtt actttttgcc 120
ttgttgccga ccctgctcag cgtcggcgac gcgttggtcg tcgacggcct gcaggtgggg 180
ttctatggaa agacgtgccc ggcggccgaa ggcgtcatca gcgacatcgt caacaacgaa 240
atcgctatgg accggggcat ctcccctggc ctcatcgcgc tcttcttcca cgactgcttc 300
atcacgggtt gcgacgcttc cattctcctg gacgagtcgc ccgccggcga cgtcccagag 360
aaggagtcgt ccgccaacgg cttcaccctg gtcgggctca gaaccatcga catcgccaag 420
tccaccgtag agggcatgtg ccccggaag gt 452

<210> 4276
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G1

<400> 4276

acgcgtccga ggcgctcgac cgggtggattt ccaacgcaa cgggctaata cgtctccaaa 60
caagttccgc tccgggaact cctccgggtt cccctcctcc ccaacaactc caacaaccgg 120
aatgaacctc agctcaagcc tcaactccgtt tcggtttcaa caaaatctcc aaaactgagc 180
atgattcccc gtggtctgcc tcatggaaat ggggtgctcaa cagcaagcac tacaccacta 240
aggatcatatc ggcagtcata gtcgtggccg ccggtgctcg gatttggtact gtcacggatg 300
tcgaggtcaa tgccaagggg ttcactctgcg cttgcgtggc agtggtctgc acgtcgcttc 360
aacagattac aattggctcc tttcagaaga agtacaacat tggatcattt gagctgctga 420
gcaaaactgc g 431

<210> 4277
 <211> 459
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G10

<400> 4277

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 tcgagcacct caacgagctt ctgctccgac gacgacgac tgccgccaca tccacatggc 120
 ggacgacgcc gtgcgcggcg gagcgggcgt tcgctgcgca gggccggcgc cggcctcgct 180
 gtcttctagc aggaagcagc atcagcagcc cgacgacgcc ggctgcggca gcagcgacga 240
 ccactaccag cacgacgtga taatgctgag gcggctgagg agcggggcggg cgttcgcgcc 300
 gccgatctcc gtgatcggca agggcgggcg gccgtggctc tgccctgcggg cgcaccgcga 360
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 caaggaggac ggcaggttca agctcctcat gcaccgcgg 459

<210> 4278
 <211> 333
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G11

<400> 4278

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 aaattgtata gaatgcaaca ctggtctcca catttcctc tatggtgtaa tatagagaac 120
 tccacgacgc tatacatggt gtgccaccaa ttaaccggag ttaattagta gcaagaagga 180
 ttaattagcg ccgtgcatgc atccatgcgg cgatgggctg gccagtaata attataatta 240
 aggagaagac acgaagcgta tagtacgttt aatcatttaa gccgacttgt tgcggttgtg 300
 gtgctccggc ttgccggcgg ccgctctaga gga 333

<210> 4279
 <211> 438
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-008-Q1-E1-G2

<400> 4279

gcgtccgatt cttctcacga tccatcaaca atcgccgaga gcgatcgaga gataaataaa 60
gatgaagaaa gtggcatcat cgtcagccgt tctcttcgtg ctagccctga cgctagtgtg 120
tgccccgctg atagcagagg caaagaagaa gagagtcgcc gccgccgccg ccgaggagaa 180
gaaggtgcac gacaacttct gctcgacgct gtgcgaaggc acgaagggga tggacctgnt 240
ggtgtgcaag gagtcctgcg acctctcaca gcgctccaac ctggtgctgt acggccggat 300
tcagtgcagg ggcaagtgca ccgagcagaa ggggatcacc gcgccgcaga tgaaggtgtg 360
ccaagaggcg tgcgacaagg actacgtggt caaggcggct ganggtcaca aggctgcaa 420
caacacctgc gccaaagga 438

<210> 4280
<211> 470
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G4

<400> 4280

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gatgggggttc caaaacaccg gcggcgccga aaagcaccag gcggtggcgc tgctggtgca 120
gtccgacaag tccatcttcc tcaactgcaa gatggacggg ttccaggaca cgctgtacgc 180
gcactccaaa gcgcagttct accgcaactg catcatctca ggcactgtgg acttcatctt 240
cggcgacgcg gcggcggtgt tccagaactg catcctggtg ctgcgccgcc cgatggacaa 300
ccagcagaac atcgcgaccg cgcaaggccg cgcggacgcg cgcaagcac cgggttcgtg 360
ctccagaagt gcgagttcca ggcccaagcc gcgctccggg actccggggc cccgcccatt 420
cgcaactacc tgggcccggc gtggcgcgag tgctcgcgca ccatcgatcat 470

<210> 4281
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G5

<400> 4281

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catccgctcc acaggatcct ctgcgccacc gcaaccgtgt gaccgcccgt gccgccggcg 120
atccccgatcc gccgacccgt cccagccccg ctgcgagcca tgtcgccgtc ggagccgacg 180
cgggaggaga gcgtgtacat ggccaagctt gcggagcagg cggagcggta cgaggagatg 240
gtcgagttca tggagcgcgt cgcgcgctac gccggggggcg ccggcggcgg ggaggagctc 300
tcggtggagg agcgcaacct gctgtccgtc gcctacaaga acgtcatcgg cgcccgagg 360
gcctcgtggc ggatcatctc ctccatcgag caaatgagg aaggccgcgg gaacgaggcg 420
cacgccgat ccatccgcgc 440

<210> 4282

<211> 462

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G6

<400> 4282

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aacaatacct ctctagctcg ccaccaacaa tggcctctag gttctccatc atgctcgcca 120
caacggcact ggctacgttt tttgtgattg gttcgtgcac caccgcgtc accttcaagg 180
tcggcaaagg ctccaagcct ggccacctgg tctcaccac caacattgcc accatctccg 240
aagtggagat caaggagcac ggtggcgatg acttctcctt tgagctcaag gagggcccgg 300
ccggcacctg gacgcttgac acaaaggccc cactcaagta cccctctgc atccgctttg 360
ccatcaagtc tggcggctac cgcacgcgg atgatgtcat ccctgaaaat ttttaaggccg 420
acaccaccta caagaccacc ctcagcatct gatcatcctc tt 462

<210> 4283

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G7

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cctgacctcc gctgccatag tcggccacga cggcgccgtt tgggcccaga gcaccgcatt 180

cccacagttc aagacagagg agatgaccaa catcatgaag gacttcgacg agcccgggtt 240

cctggccccg accggcctct tcctcgcccc caccaagtac atggatcatcc aaggcgagcc 300

cggcgctgtc atccgcggga agaagggatc tggaggcata actgtgaaga agacagggca 360

agcgatggtg gtcggcatct acgacgagcc catgaccccc ggccagtgca acatggtggt 420

cgagaggctc ggcga 435

<210> 4284

<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-G9

<400> 4284

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gccgctcctc ttcacatggc acgggatcca gcagaggaag aactcgtggc aggacggcat 120

gccgggcacc atgtgcccga tccagcccaa caccaacttc acgtaccact ggcagcccaa 180

ggaccagatc ggcagcttct tctactacct cagcaccggc atgcagcggg cggcgggcgc 240

ctacgggctg atcagcgtcc acagccgtga cctgatcccg gtgcccttcg acacgccggc 300

cgacgacttc ccggtgctca tcggcgactg gtacaccaag gaccacgccg tgctggccaa 360

gaacctggac gccggcaagg ggatcgggcg gccggcgggg ctggtgatca acggcaagaa 420

cgagaaggac gcgtcgaacc cgcccatgta caa 453

<210> 4285

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-H11

<400> 4285

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 cagagggccg tcacctgggtc cgctcgccgt tgtgtccatt cggggcaaac acagagacct 120
 cgggagcctg ccgcacctcc atcgagcggg acggaagaat ggtgggagaa cagagaaact 180
 ccaccgccat ggccccggcgc cgcgcctcct ctggtgcact ggtaccgctg ccatgtgccg 240
 tgcagtgcgt tgggtgggatc ctgtcgtcgt ggtgggaatc cagcggccct gggtaattcg 300
 ggtgtgcgcc cacatttggc ctcggtgacc agctacagga ttccgccgac atctccagt 360
 caaatcatgt ggtcattccg ggtggattga tgccggggga ccctgggatt gttcaccgga 420
 aaatctacac agcggcaaag cgactctgag c 451

<210> 4286
 <211> 456
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-H2

 <400> 4286

ccggtctaga actccccgggc cgaccaacaa ggctacccta ggtggcctat cggcgattct 60
 cgctcgtggcg gtggtcctcc gtgtggtcgc caacgtcaac cgctccggca agaaaggcgg 120
 cgacaacttc acgggtcccg gggaagcttc ccttgccacg tccggcaagt cggtaagtc 180
 cctgtgcgcg cccaacctat acaaggagtc ctgcgaaaag aactgtccc aagccaacaa 240
 tgggaacgag aaaccaagg aagtgttcca cagcgtgggc aaagtggcgc tggaatccgt 300
 ccagacgggg tccaacagtc caagtcgatc ggcgaggcca agggcagcga ctccatgacc 360
 ganagcgcgc gcgaggactg caagaagctc ctggaggacg ccgccgacga cctgaggggc 420
 atgctcgaga tggccggcgg cgacatcaag gtgctg 456

<210> 4287
 <211> 400
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-008-Q1-E1-H3

 <400> 4287

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 caaaccatc aaccatggcg aactccgct cgggatggg cgtagcgac gaatgcaagc 120
 tcaagttcca agagctcaag tcgaagcgaa gcttccgggt caacaagttc aagattaacg 180
 aacaaacgca acaagtgggt ggggacaagc ttggggaacc gggcgaaaac tacgacgaac 240
 ttcacggctc catgcccga aagcagtggt gctacgccgt cttecgatttc gactttcaca 300
 ccgacgataa ctgccagaag agcaggatct tggatcatct ctggtcccg gacacctcga 360
 gggtcangag caagatgctg tacgcgagct ccaaaggacg 400

<210> 4288
 <211> 456
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-H5

<400> 4288

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 tctcccggtt ccaagcctcc atccaattgg atagtcgctt cgtgcgggtc cgtccctcgc 120
 ccggccggcg gagctcacgg cttgccgctg cattgccatc gtgtcacttg tacacaatcc 180
 accaatctga ttggattcgg ggggatgctt gggcaaattc gagaatttgc tcaggcattc 240
 gttccgattg cggctagcta gctgatcgct taatcactcg acacgggcaa atttgacagg 300
 cgacgacgat gggcatcttg tgttggttcc agtcccacac cagcgatcac gctgttgctt 360
 cgtccccggc tacctcttcg tctctgccc cctcgtcgtg ccgaaacaac gatcgccgtg 420
 ctcccccca gcggcaggcc cccggcgagg agaaga 456

<210> 4289
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-008-Q1-E1-H9

<400> 4289

gaccacgcg tccataaaaa atcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaataa aaaaaaaaaa 120

aaacaaaaaa aaaaaataat aaaagggggg gcccccccaa aggttctaata tttattttcc 180
 tttcaatgca atttcttctc ttttcaaaag tttcccaaata tttcatttaa ggggcttttt 240
 ttttaaaaact ttttaagggg aaaacccttg gggttcccaa tttttacccc ttttaaaaaa 300
 atcccctttt cccaacttgg tttaaacctt aaaggcccca ccctttttcc ctttcctaaa 360
 attttccaac cttaaagggc atttgtgacc ctctttttta ggcgacttaa actccgttgg 420
 ttttgggatt ttcccc 436

<210> 4290
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A1

<400> 4290
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 gacgacgtct cctcctcgct gtctctctgc agctgcaact gcaagcatgg caattacttc 120
 agacaagatc tgcgccatgg cggcaacgac gacggggatg cagatgatgc acgcggcggc 180
 gttgccgctg tgccctggctg tgttggcagc atctacgcgg gtcgcgctgg gcaactgccg 240
 cgacgactgc atggctgcat gcaacggctg gaccaacgtc tgccagctca cctgtgccag 300
 cgcgtgctac agagaactcg ggatcagaac cttacgtacc tcggctgtat tagctaaagc 360
 agaatgccct gcatcagcac cacatgcaac acaagagcga agcgccg 407

<210> 4291
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A10

<400> 4291
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 gccagcttgc tcgccgcgcc cgtccttctt cctcgcctcc gttccattcc gtcccgcctt 120
 ccaccgccgc cgccgcatte agggatggag atgaagaaga tcgcctgcgc cgtcctcgtc 180
 gccgcctcgg cggccaccgt ggcgctcgcc gcggaggctc cggctccggc ccccaccagc 240

ggctcctccg ccgtcgcgcc cgccgtcggc gccgccctcg gggccgccgt cgcctccttc 300
 ttgcctact acattcagtg agccggccgg ggcgcccgga ggccgaggaa gagacgacgg 360
 ggagagagag tgacatggct gcgcgcattc cgatgcgtgg gcatgttttt tgattcgaca 420
 caccttttgt cctctttttc attgttccct 450

<210> 4292
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A2

<400> 4292

ccacgcgtcc gacccgctct tccaagttag gaggggagca cccatcagcc aagagctatc 60
 catacgaca gcgatgcacc agcacgagat actagccatc atgcgcctgt cgccccctcct 120
 cctcgtcgtg gccgccctct cggcgcgcg cgcggcgag caggtgccgc cgggtggcgg 180
 cagcgtcttg aagccggact actacagcca gtcgtgcccg cgcgcggaga ggatcatcgc 240
 ggaggtgatg cagacgaagc agatggcgaa cccgacgacg gccgcgggca tgctgcgcgt 300
 cttcttccac gactgcttcg tcaccgggtg cgacgcgtcg gtgctgatcg cgtccacca 360
 gttccagaag tcggagcacg acgcgagat caaccactcg ctccccgggg acgccttcga 420
 cgccgtggtg cgcgcaa 438

<210> 4293
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A4

<400> 4293

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 ggccccctca gagcaacgta tttcctctac agtgtcggcc cctcccggtc tccgcctacc 120
 acatgctgtt tgcgagggct tcttacagcg ctcaaaaccg tactttcatt ttactgcaca 180
 tctttaatga agatctagac ttctcatcgg acatttcgtt cacctctcca aactcacgt 240
 ctctaataatc atgactcctg aaccggtaat cgagcagtag gctccgctac cccggagggg 300

cagacaacgt cccgacccac ccttacttct cagctctaac atgggacatg atcacgtctg 360
 tgtgcacacc accttaaagt tctccttatg gtgatca 397

<210> 4294
 <211> 311
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-A5
 <400> 4294

gggtcgaccc acgcgtccac ggaggagtac gtggcgccag agatggtgcg cggcgagggc 60
 cacggcttcg ccgtcgactg gtgggcccgc ggcgtgctcg cctacgagat ggcgttcggg 120
 cggacgccgt tcaagggcca gaaccgcaag gagacgttcc ggaacgtgct gcagcaggag 180
 ctcgagttcc cgggggacac ccggtggcgg acgccggagc tcgcggatct catctcgggc 240
 ctgctggagc gggacccgaa gaagaagctc gggtagccg gcggcgccga cgaagtccgg 300
 gcccaaccgt t 311

<210> 4295
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-A7
 <400> 4295

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 aataccagct taccaacaac agcagcagca agcccacccg ttcgacgaca tggccccgct 120
 cggcgccggc gccgtgttgg cgctcctagt ggcggtcgcg gcggtggccg cgttcctcgc 180
 ggtgccggcc tcggcgaagt ccggggagct gagcgcgatg gggttgctgg cggcgaaggg 240
 cggcagcggc gcgggcccgc agaagtgtc gggcgcggtg ggcgagtgcg acgtggacga 300
 ggcggaggag ctcgggctga gcggcgccg cctcagctcc gacgacgcgg tcgggcggac 360
 gctggcgcat gcgaagccga ccaaccggt catcagctac gcggcgc 407

<210> 4296
 <211> 463
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-A8

<400> 4296

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aaaaatacca gcttaccac aacagcagca gcaagcccac ccgttcgacg acatggccccg 120

cctcggcgcc ggcgccgtgt tggcgctcct agtggcggtc gcggcggtgg ccgcgttcct 180

cgcggtgccg gcctcggcga agtcggggga gctgagcgcg atgggggttg tggcggcgaa 240

gggcggcagc ggcgcgggcc cgcagaagtg ctcgggcgcg gtgggcgagt gcgacgtgga 300

cgaggcggag gagctcgggc tgagcggcgg cggcctcggc tccgacgacg cgggtcggcc 360

gacgctggcg cagcggaagc cgaccaaccg gtacatcagc tacgcggcgc tgcncgcgga 420

ccaagtgccg tgcaacaagc gcggggcggtc ctactacagc aac 463

<210> 4297

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-A9

<400> 4297

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atggacctgg cccgggtcgg ttgcaacaaa ggattccaat aacttcgagg tttgcaacga 120

attgctcgtc agatctggat tgcgtgagac catctagtgc cccaaaagct tctggtttaa 180

caaacggagg gggctcagct gcaagaaagt cccaactgaa ggggtgcaaaa agttcagaca 240

tcagaggagg gaatcctgca aaaaagtcac cgcccttaca gaaaaagctg agtgctccct 300

caccaacggt aactaagaag agcgggaactg aaggaaagaa aactccaaat ggaaaaacag 360

gagccaagaa gtaagcaact cagttgaaac ttcgttttgt tgggaccaac ttcaccatgg 420

ccggggacag ataaaca 437

<210> 4298

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B10

<400> 4298

gtagccgtcg agaattcacg ggtagaccca cgcgtccacc cagcggtccg cccacgctc 60
cgaaagaata gttaggtccc ggtgggtgat cgaacgaagc tgctgctgct accggccggc 120
cgggcatgac gatgacacgg acgatgtgcc taggcctgct gcttctacta ctggcggcgg 180
cgtagacagc gacggcgcat ttcacgggtc gcgatgtgga tgagtacgtg tccaagcgca 240
cgcaggagtc ccgccacagg aacaacggtg gcgcgggcat cgatgacctc atctccagt 300
cggcgcgctt ccacgccaac gtggatgcac gcgcctatgg ccgtagatcc gacctgcagg 360
aggaggcaac agctaccgta ataaccaaag cggaagcaca agaggcttca gctgaagggtg 420
gcgattaacc tacctaacca tatta 445

<210> 4299

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B11

<400> 4299

accacgcgt ccacaactgg cggcgcttcg ccgccttcgt gcgccgcatg aacggcgccg 60
ggtagtgccg ggacgccccg gagcgggagg cgcacggcgt ctcgcaggcc accgggtcgc 120
tggtgcacga ggccgcccgc gcgctgcgga gctgaccggc cgggccggga cgggaccgaa 180
cggaagccta cgatcgactg tacatacagg ggttgggact tgggagggag ctcgggttct 240
tgttgggttt tcctttgggt ggagagcgag ggagcgcagt cgagagccag cgagcagtct 300
ctcgtgcagt gcagtgcagt gcagtgcagc tccggcgtag atgagattgt attgtgacca 360
agccgggagg gaaagcaggg atgggaggac aaagatgttt tgtcacgttt caggctccgg 420
ccatcgccgg agtttgt 437

<210> 4300

<211> 304

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B2

<400> 4300

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ttgtatttct cgccgtgggc tcaactggcg ttctgggcgg ctacgatggt atagatatcc 120
tggaacgacat ccgcattctga tccagatatc agaattctct gcaagacagg atcgtagcgg 180
gagaggcaac tgatctacgg tcggctacgc aactgctcgt acgcgatcaa gttgacaaac 240
cgctggtttc acctgtaggc gataaagtcc tgctgacct ggagaaacat gtcattctca 300
ttta 304

<210> 4301

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B4

<400> 4301

aattccccggg ccgacccacg cgtccattca agcacctcct cttcccccg cgggcaacaa 60
ctcagccgcc gcaaccgcca catcagccat gggcgctgc gcaaccaagc ccaagacgct 120
tgaggggagc gccccagctg agggcgccgt ctccacaccc aagggttgcg ccgaggccac 180
tccaattctcc gttgaggttg cggctgatga acaggtatct gagaaaagtg tggaggagga 240
gccggctgcg gcggccgacg ttgagcatca gaaggctaag gaggtgctcg ctccagacgc 300
ggccgtcgcc gagcccgacc acaaggagga ggaagccgtg gagaagaccg tcgtcgagga 360
agagatgcca acggcagcag cccatgcaga ggaaaaggtc gccaccgccg ccgag 415

<210> 4302

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B5

<400> 4302

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cctcgcttg atctccaacc ctttccttc ttgcttagga gagagagga ggagaggaga 120
ggaggaagaa gatggagagg gcggccccag tgaggagttc ccacacctc acggccggcc 180

tactcgcgtg gcctcaaccc gatggcgccg cgtcgcaggc accacgtcgg cctaaccagc 240
cgacggagga attcaggaag gtggtgttcg gggggcaggt caccgaggag gccgacggtc 300
tcaacaagac gaagatgacg acgacggcct ccgcacccaa gtcgaaggag acaacaggga 360
tcggcatgtt taaggccgag agcgccgccc ccgccgtcac aactgcatcc cgtgatcgcc 420
aagc 424

<210> 4303
<211> 350
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B7

<400> 4303

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ggaggagatg gagaggatgg tggaggcgga gtgggaggag gggatgagga agaggaagcg 120
gtacgggctg gtggagtacc gggcgctgcc ggcttacctg cgggacaacg agtacatcca 180
ccgccactac cgctgcgagt ggccgctccc gcaggttctg ctctccgcct tctccatcca 240
caacgagacc ctcaacgtct ggacgcatct tatacgattt ttcattcttc tcgctctgac 300
catatacaca gcaacacaag ttccaaatgc agtatatatc cggagcttgc 350

<210> 4304
<211> 450
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-014-Q1-E1-H7

<400> 4304

attcgccggt cgacccacgc gaccgacgag atcttcccc gatcgacctc gtgacacctg 60
cggccatgtc gtcgtcggca gccatgggca attgatgaat tcgtctagct ctctgagtcc 120
atgcggctag acgcctcgct acctgcggat gatgacctat ccaatgagac cgcctcgcac 180
cgcccccca tcattctcaa cgccgtcgcg ctcggaata tcgatgctgg caagtcggct 240
gtgtggaaca gcctcatcgg ccaccctgtg ctgcccacgg aaggggaaaa ccacgcgtcg 300
cagaccgccc ggaacctggg cgcgggcgaa tcttgcgcg tggtctgctg gtgaggccgg 360

aatcgctcac tagagccaac tcgtcgctt gcgcccgcg tatatcgtgg ccagcagctt 420
 ctgctctaca atcgctggaa ataccgcctt 450

<210> 4305
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-014-Q1-E1-H8

<400> 4305

gaccacgca tccaacacca agcgtcaaac ttgccaagca gctagcaacc aaccaagaa 60
 agctagacac catacccatg gctcgcgcta gcgtcgtctt cgtcattgct actctcctct 120
 tcgtcgccat ggttgtggca ccgatggccg aggcaaagtc cgctgatgcc ccctccgccg 180
 acgccccgc ccccgctgct gacgcacctg ccgatggacc tagcggaccg gcgggtgcac 240
 ctggtcccca gggcgctcag ggtctatcgg gcaatgagga cgacgatgat gactccacca 300
 actaaggcca agcacgtcgg tccggttgca tttggaacaa gacatggaag aaaagtgaga 360
 gcaatgtcgt ttaaaaccaa aagtccataa taatgtgtgg tcatccgtga tatgttcttg 420
 ctctncctct tt 432

<210> 4306
 <211> 388
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-015-Q1-E1-A1

<400> 4306

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 acctggtcgt tccctggcat cggcgagttc cagtgtctacg acaggttcat gctgagtagc 120
 ttgaaggcgg ctgctgagga agtgggcaag ccggagtggg gcaacgcggg tccgggagac 180
 tccggcagct acaaggactg gccggaggac acgggcttct tccggcgca gggcggtgg 240
 agcacggagt acggggagtt cttcatgagc tggtactcgc agatgtcct ggagcacggc 300
 gagcgcatcc tgtcggcggc gacgggcgtg ttcacngnng tccccggcgt gaagatctcg 360

gtgaaggtgg ccgggatcca ctggcact

388

<210> 4307

<211> 456

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-A10

<400> 4307

gtaccggtcc agaattcccg ggtcaacca cgcgtccgag cagactggag gaaaaccttg 60

gcattttcac aaacaggctt gcttccggtg acgccagagg tagtcaagaa gacgtgctgt 120

ttgaagagca tgagcataca acagctgatg ggtcaccttc caacggtgac aagttgagcg 180

gcgtagcgaa tcttaaggct gggattttctc tgctcaatat aagactgagg gcacttgaag 240

atgaccagga gttttctcaag caggtgttga gttccctcca atgcggtagt gatggactgc 300

agtgtataca ggagataagc ggccatctag cagagttgcg aagagttgtg actcgctaag 360

gaaaatgggtt ttgccccgag tccaaattgt taggtcatca tgaggtcttc tcatgcagca 420

gactaacgag ggtgcttcca ctgagtgccc acaatc 456

<210> 4308

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-A11

<400> 4308

taccggtcaa gaattcccg gtagaccac gcgtccacc acgcgtccga tcacgacaag 60

atggcatgca caaacaatgc gatgagagcc ttgttctctc tggctctctt ctgcatcgtg 120

catggtgaga aggaagagtc aaagggcatc gatgcgaaag cgtccggggc tgggtgggtcc 180

ttcgacatca ccaagttagg cgcctccggc aatggcaaga cagacagcac gaaggctgtg 240

caggaggcat gggcatcggc gtgcggcggc actgggaagc agacaatcct catacccaag 300

ggcgacttcc ttgtcggaca actcaacttc acaggccctt gcaagggcga cgtgaccatc 360

caggtggatg gcaatctgct ggcgaccacg gacctaagcc agtacaagga ccatggtaat 420

tggatcgaga ttctacg 437

<210> 4309
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-A2

 <400> 4309

ttccccgggta gacccacgcg tccgaccacg cgtccgacgc tgcccccgcc cggccctgcc 60
 ctgccctgcc ctgctgcgcc caagcagctg aatctccgca cagacaatta gagtagctgc 120
 attggcgggg aaagcgcaag aagctcagca gaaatggcgg agcaggcagg cgccggaagg 180
 tactggtgcc acatgtgcgc cgcggtcgtg agccccgcgg agggcgaggc ggaggtgaag 240
 tgccgcatt gccacagcgg cttccttgag gagatggaga ccgtccgcgg cacgccccgcg 300
 gccgatgacg gcgacggtga cggcgcggtg gctcaagtgt accccggcgc cgaccgccccg 360
 agtccatct gggcgcacgc taccctcagc acggtcgaca gtcctgtccg ccgccgccgc 420
 aac 423

<210> 4310
 <211> 299
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-A3

 <400> 4310

taccggtgaa caattcccgg gtcaactacg catcaaatga gggcaagatt cggcgtccct 60
 agtcaatct tgaaccatag ctagccagca tggcgcccat cagcagcata gcaatactgc 120
 tgctcctcgt catcgccgtc gtcctctcag acgtcacctc ctcgggcgcc ctggcctcct 180
 cgtcgtcgtc tctgctgcac cagtcgtctc cgtctgagag tgagactgag accgacagta 240
 gcagcggaga atcttcgtcg tcaccctcgt cgccagaggc actggtacat ccagagcac 299

<210> 4311
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-A4

<400> 4311

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gctaagcagg tctgacagga tgtcgtggca gacatacgtc gatgagcacc tcatgtgcga 120
gatcgagggc caccacctga cctccgctgc catagtcggc cacgacggcg ccgtttgggc 180
ccagagcacc gcattccac agttcaagac agaggagatg accaacaatca tgaaggactt 240
cgacgagccc gggttcctgg ccccgaccgg cctcttcctc ggccccacca agtacatggt 300
catccaaggc gagcccgggc ctgtcatccg cggaagaag ggatctggag gcataactgt 360
gaagaagaca gggcaagcga tgggtggcgg catctacgac gagcccatga ccccgggcca 420
gtgcaaca 428

<210> 4312

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-A5

<400> 4312

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caggggtctta tctttgttgt ggacagcaat gaccgtgacc gtgttggtga agccagagat 120
gagctccaca ggatgctgaa cgaggatgag ctacgtgatg ctgtgctgct tgtttttgcc 180
aacaagcaag atcttcccaa tgccatgaat gctgctgaga ttactgacaa gcttggatta 240
cactccctgc gccagcgaca ctggtacatc cagagcactt gtgccacaac tggcgagggt 300
ctgtatgaag gcctggactg gctgtccagc aacattgcga gcaaggcttg aggcctacct 360
tgaatgtcaa ccgcgaactg actaggagct ccggatgtat catggaaact caggacagaa 420
tcgcagttgc aac 433

<210> 4313

<211> 365

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-015-Q1-E1-A6

<400> 4313

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cgggccgcgc agcccagccc ggattacagc accgactacc ccgctcccat cccggagttc 120

ggccacccgt cggccgcgag cagcgccagc tcagtcgagc gggatgaccg gcggcatcgt 180

ggagggcgcc ggtgagtacg tgatcgacag gtgtgagcgt gatgtgctga cgactaattg 240

actcctgcgc atccctgtca cgtgtgtata gcatatagtc gtcttgctgt aaaaggttat 300

ggcatactcc cctgtttaaa atgtacaggt taaatttggc ttacttcaac aanggattat 360

ataat 365

<210> 4314

<211> 206

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-A7

<400> 4314

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aaaaaaaaaa aaaaaacaaa aaaaaaaaaa aaaacaaaaa aaaaaatctc caacacaagg 120

gttgacctca acgatgttcc acgattaggg gccacctcaa tccaacttca taacccttct 180

aatctttcac ggaacttcat gtcttc 206

<210> 4315

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-A8

<400> 4315

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gtcgccatgc tagcgggtggc cgccgatgtc gccaacgccg gccacgcaa gcccctgacg 120

cctggcgggc gcgtggtaca cgacaaccac ggcaagtcca cggccggggc gtggaaacct 180

gccacgcga ctttctacgg cgggcgggac gggtcggga ccacggcggg cgcgctgcggg 240

tacaaggaca cgcgcgagca ggggtacggc gtgcagacgg tggctgtgag cacggtgttg 300

tttggcgatg ggcgggctg cggcggtgc tacgaggtgc ggtgcgtgga cagccccagc 360
 gggtgcaagc ccgacgcggc ggcgctggtg gtgacggcga ccgacctgtg cccgcc 416

<210> 4316
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-A9

<400> 4316

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 aactgccgcg tccgtaggaa gtgctagtgc gtgtgcatca ctaggctgca gctttcatca 180
 ttggagatcg atcgcaacag tgcacggttg tgttgtagat aaatcgtgtg tttggaatgc 240
 tgcccgtaaa tactggacaa ctgcaacagt gcttgccctt gcctgctggc cagcatcacc 300
 attggcgatg ggcgagcctg cggcggtgc tacgaggtgc ggtgcgtgga cagccccagc 360
 gggtgcaagc cca 373

<210> 4317
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-B10

<400> 4317

cacgcgtccc agcggcgcca tggacaccgt gttcctcgtc gcggaggggc cctcggcctt 60
 gcgccccagc cgtacgccc tcaaggtctt cgacaagcgc tccgccgccc gcagcaggaa 120
 gcctgacgcc gaccgccgcg cgcggtggga gatcagcgtg ctctcccgcc ttgcgcaccc 180
 gcacctcccc tcgtcctcgt gcttcaccga gacggacgac cttctcgcgt gggccgtccc 240
 ctactgctcc ggcggcgacc tcaacgagct ccgtactcgt ctccccgacc gcatcttctc 300
 ccccgcggcc atccgtttct acattgccga gatcgtctcc gcggtcgccg agctccacgc 360
 cgcgggcgtc gtgtaccgcc acctcaagcc cgacaacg 398

<210> 4318

<211> 287
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-B11

 <400> 4318

 taccggccaa gaattcccg gtagaccac gcgtccacgg caaggtcgtg gggctgccgc 60
 tgccgccgtc ctacgcccc gcgcgctaag acgacgaagg cctcgttttc tcctcgtggt 120
 ctgaccatcc aatccaaact caaaagaaca aatacgaaag aagcgtagtg aaggggaaca 180
 aatgaatgga tatatgtaat cttgagatgc atgccctctc aaatcactgt actgggggttc 240
 tcaaaaaaat cattgtaatg ggagttatat atataacttt atctcaa 287

<210> 4319
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-B12

 <400> 4319

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 tttcactgct tgaagacctt tggttctcac ttcacagaag atatcgctat accttcgggt 120
 acgaagattg acttctgtca aacatcagat gggaagctta taacagaaat tgatgggaaa 180
 caaattgggtg ctgttcggag caaagatctt tgcaaggctt tcttcgacat gtatattggt 240
 gattcaccgg tttcactgga ggccaaaaaa gtcgttgccc agaacgtggc tgggctcatt 300
 ggaagacgct gaggatagcg agaggatggt tatttcattc ttctgtacag ttagagagga 360
 ttcatatgag cgggaaaata ggccaagtat gtagagtgat ctgtcctgta tagaaag 417

<210> 4320
 <211> 319
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-B3

 <400> 4320

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cagcaggaac caggacaagg aagtgctgaa ggtagccatg gtctgcaaga cacaaaggag 120
caggacataa taaagggaaa ggcggctctt gtttccactg aactgctgag ggaggatctg 180
gttcagagtg ctgttagttt tctgaaacac ccgaaagtag tagcctcttc agatggacag 240
aggcgatctt tccttgtaaa taaaggactc accatggatg aaatagatga agcatttcaa 300
cgtctacaaa acccgtcac 319

<210> 4321
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-B4

<400> 4321

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ccgcgcgggc tgccctgcggg agcaggggtg cagggcactc cggcaaccac gtgggtgggg 120
aggcgacgac accaccctag gctctgtcct cgcccgagg gtaagattgc agcagcagtg 180
aatttgggag cttgaagcat tcctctgaga catggaaaaa gtgatctgct gggcatatct 240
ccttcaacgc aagcagttct cgaaagaaac tcttgattgc tgtgtcgtag ctctgtgggaa 300
cactcctctc ccctctctcg tgaactacac atagtgatta tatgttccct ctatgctcaa 360
cagcaagcag gctgatgcga tattttgctg aagt 394

<210> 4322
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-B5

<400> 4322

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agcttgccat ggcggccgtc cggctccgaca ggtccacca ccaccaccgc cgctccgagg 120
cgctgtgtcc ggcaacctcc gcggccgtgg cggcggcgag ggccgatgac gccctgcgcc 180
agcgcgccgc ggggctcgtg caggtccggg agcgggacca gggcccgtg tcgacggggc 240
accagcacct gcaccacat caccaccagc tgcggcggtc ggcggcggtc ccaccccgcc 300

gcccggggcc ggggcgccgc cctcctcagc gctgcgaaag cgacctcaac atcagggagc 360
 accgctcctg cagcgagggtg gccggcggca acgcggcggg ctgcgccgct gtgtgctgct 420
 gcttcccctg cg 432

<210> 4323
 <211> 415
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-015-Q1-E1-B6

<400> 4323

ttcccggtc gnaacacgcg tccgaccacg cgtccgccca cgcgtccggg agctcaacat 60
 ggacctcttc cgcaagtgc tggagcccgt ggagaagtgc ctccgcgacg ccaagatgga 120
 caagagcagc gtgcaggacg tcgttctcgt gggcggtccc actcgcatcc cccgcgtgca 180
 gcagctgctc caggacttct tcaacggcaa ggagttgtgc aagagcatca acccagacga 240
 ggctgtcgcg tacggagcgg ccgtccaggc cgccatcctc actggcgagg gcaatgagaa 300
 ggttcaggat ctgctcctgc tcgacgtctc gccgtctcgt ctcggcctgg agacggccgg 360
 atgcctcatg actgtgtctc tcgccaggaa caccaccatc ccgactaaga aggag 415

<210> 4324
 <211> 398
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-015-Q1-E1-B7

<400> 4324

ccacgcgtcc gaccacgcgt ccgaccacca ccaagctcaa caacagccag ctcgcgaaaa 60
 taatgaagag ccgcagcatg gcatcatcgg ccgcgtcttt ggtgctagcc ctcgcgctag 120
 tggcggccac cgccccacag gtagcggagg caaagaagaa gagagcggcg gagagcggcg 180
 aggcggcgga ggcgaagaag atccaggacg acttctgctc gacgctgtgc gagggcaaga 240
 aggggacgga cctggtcgtg tgcaaggagt cctgcgcgct ctcccagcag tccaacctgg 300
 tgctgtacgg caggatccag tgcaaggga agtgcaccga gcagaagggc atcacggcgc 360

cggccatgaa ggtctgccaan gaggagtgcg acaaggcg

398

<210> 4325
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-B8

<400> 4325

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gcggcgccac tgggaagcag acaatcctca taccacggg tgacttcctt gtcggacaac 120
tcagcttcac aggcccttgc agtggcgacg tgaccatcca ggtggatggc aatctgctgg 180
cgaccacgga cctaagccag tataaggacc atggtaattg gatcgagatt ctacgtgtgg 240
ataacctggt catcaccggc aagggaaacc ttgacgggca cggcccagcc gtgtggagca 300
agaactcctg cacgatgaag tacgactgca agatccttcc caactcgctg gtgatggact 360
tcgtgaacaa cggggacgtg tccggtgtca cgctgctcaa ctccaagttc gtccacaatg 420
aca 423

<210> 4326
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-B9

<400> 4326

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ggaggagttc gcagcgtact gccggagggg aaagggaagg agaagggtgg aaatggagga 120
ccggcatgtg gccaaagtcg ctctcggcgg ggaccccaa gtggcactgt ttggtgtgtt 180
cgatggccac ggcgggaaaa acgcggcaga gttcgccgcg gagaacatgc ccaagtttat 240
ggccgaggag ttgacgaagg taaacggcgg agagatcgaa ggagcggatga agaggggtta 300
cctcaagacg gacgaggagt tcctcaagat ggacgagagc gggggcgctg gctgcgtcac 360
agccgtcctc caaaagggtg gactggtcgt ctccaacgct ggagactgcc gtgcggtgct 420
c 421

<210> 4327
 <211> 446
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-C1

 <400> 4327

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 atcaaactaa cgtagccatg gaagaagctc cacgtcattc catgtagtta cttcttcaga 120
 gcgcgcgggtg gcggccggct agaagctttg ttcggtgcat ttgaattcat caccaaagga 180
 gaaggcgcct gttggcgctc caccaattcc atcccatcgc cacaaggtcg tcgatcacgc 240
 ggatcgtcgc gactgaccgg cgggcctcct cagccgtcct tgttggtgcta caagatcgag 300
 gcgacaggat ccagccagcc acgatgtcgg cggccggcgc caccgccgtc tgcacgaagg 360
 acggcggcct cctcccgtg cgccgcact gcgcgaggtc gtcctcctcc ttcgccgccg 420
 ccgccgccgg catcgatgat tacctg 446

<210> 4328
 <211> 452
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-C11

 <400> 4328

 tacggtcaag aattcccggg tagaccacg cgtccagcaa gcaaccgtgt gccttttggga 60
 gacgcgatgt cgtccggcaa caagatcagc gtggccttgc tgagcgtggc cctagtgggc 120
 ctgctcctct gccacctcgc caccaccgcc tccgccacc agaaagacat ccacgtcctc 180
 ggcagcgtcg acggctccag cgacggcagc agccccgagt ccgaaggccg cgtcgtctac 240
 gcggacatga agctggctga tacggaatcc gatgcgccg cgccggcgcc ggcgccgggg 300
 ccgtcgtccg gttgaactga gaagcgtgcg tccagccaag caaggtggtc aaaaccgaga 360
 actaattaag ggctcgattg tgtgtccggc tactactgtt cttgccataa ttatatatag 420
 atacgcaaag tgtggccaag cctaccaca tg 452

<210> 4329

<211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-C12

 <400> 4329

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 catcgacatc gccaaagtcca ccgtagaggg catgtgcccc ggcaaggctc cgtgcgacga 180
 catcctggcc ttgcggggcg gcgacgccgc cgtggccgcg ggctctccga gatacgaggt 240
 cgcggcgggg cgccgcgacg gcatgcgctc gaacatggac gacctcccgg gcaacttccc 300
 cgtgccgggg caccacgtgc cgcgcctcac cgagctcttc agccagcggg ggctctccca 360
 ggaggacctc gtctgtctct ccggcgcgca ctccatcggc ggcgcgact 410

<210> 4330
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-015-Q1-E1-C2

 <400> 4330

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 agggccgggt gagcacgagc gctgcccgt cgctgaacca tggcgggctc cgcggtggcc 120
 gtcgtctctc tgctggcgt cgcgctgctc tgctgtacc acctccttt cctctccctg 180
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 gggcagccgc tccgctcca cgacccgcc gccgccgcg gcctcccga catcgacacc 360
 ttccgaggca agctcgancg gctgctttct cccggacgac acgaccccg ctggtcgcgc 420
 c 421

<210> 4331
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-C4

<400> 4331

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gcctccctca ccaaataagg tcccgcctt ttccgacatt cacagggggg acaggaaatc 120
agcggccatg gcctcgattc cggcgacgac cttcgccgtc atcttatccg tcctcttctg 180
tgccgcggct ggcaccgccc tgcacaacga cctccccgac tacgtcatcc agggccgcgt 240
ctattgcgac acctgccgcg cggggttcgt gaccaatgtc accgagtaca tcgcggggcg 300
caagggtgagg ctggagtgcg agcacttcgg caccggcaag ctcgagcgct ccatcgacgg 360
ggtgaccgac gggaaaggca cgtacacgat cgagctcaag gacagccacc aggaggacat 420
c 421

<210> 4332

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-C5

<400> 4332

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aaagcgccg ggcctggtgg gtccttcgac atcaccaagt tgggcgcctc cggcaatggc 180
aagacagaca gcacgaaggc tgtgcaggag gcatgggcat cggcgtgcgg cggcactggg 240
aagcagacaa tcctcatacc caagggtgac ttccttgctg gacaactcaa cttcacaggc 300
ccttgcaagg gcgacgtgac catccaggtg gatggcaatc tgctggcgac cacggaccta 360
agccagtaca aggaccatgg taattggatc gagattctac g 401

<210> 4333

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-C6

<400> 4333

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tcgtagttga gcagcagcaa ccaactgcaca ggatgtcgtg gcagacgtac gtcgatgagc 120
acctcatgtg cgagatcgag ggccaccacc tgagctctgc cgccatagtc ggccacgacg 180
gcgccgtttg ggcccagagc accgcattcc cacagttcaa gccagaggag atgaccaaca 240
tcattaagga cttcgacgag cctgggtttc tggccccgat cggcctcttc cttggcccca 300
ccaagtacat ggtcatccaa ggcgagcccg gcgctgtcat ccgcgggaag aagggatctg 360
gaggcataac tgtgaagaag accggacagg cgctggtga 399

<210> 4334

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-C7

<400> 4334

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gctccaagcc ccgccccgt ctcgccccct tagttgctg ttggggcgccg ctgccccgccc 120
gcccccgccc accatgcgtc gtgtctgcgc gcgcacgcac gcattgaacg ggagatagaa 180
tatggtatcg ttcaatgcag attgccatgc tatagctcca gagtttatct acctggtagc 240
accatgacac gatggccccgt tcgtattttc tggcttgctc gtacttttca gttccatggt 300
tttacaacac cttttactcc cagcagaaaa tacataatat gcatgtactc ctcttttttt 360
ccgtatagta atataaacia attttcac 388

<210> 4335

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-C8

<400> 4335

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atactaataa tttatcacta tacataacca atatataagc catgggcaag cgcagcgtcc 120
ctcggtagcc tgaggacgag gacaaacgcg gctgctgcgg ctgcctgtgc tgggtgctgct 180

gcttcctggtt gttcatcgtg ggggcgctgg ccggcacggc cgcctacttc ttcttcgtgt 240
 acaagcccaa ggcgccgtcc tactccgtga gcaacatgtc cgtctcgag ttcgacttca 300
 gcacctccga cctgacgctg tacgtcaagc tcagcgcttc cgtgcgacc gagaacccca 360
 acgagatgat caccatcag 379

<210> 4336
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-015-Q1-E1-C9
 <400> 4336

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 agccagctcg cgaaaataat gaagagccgc agcatggcat catcggccgc gctcttggtg 120
 ctagccctcg cgctagtggc ggccaccgcc ccacaggtag cggaggcaaa gaagaagaga 180
 gcggcggaga gcggcgaggc ggcgaggcg aagaagatcc aggacgactt ctgctcgacg 240
 ctgtgcgagg gcaagaaggg gacggacctg gtcgtgtgca aggagtctg cgcgctctcc 300
 cagcagtcca acctggtgct gtacggcagg atccagtga agggcaagtg caccgagcag 360
 aagggcatca cggcgccggc catgaaggtc tgccaggagg agtgcgacaa ggcgtacgtg 420
 gtga 424

<210> 4337
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-015-Q1-E1-D1
 <400> 4337

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 cttgccaca agttcacgaa gttgcgagtt ctactcgcc ggcagaacac acctcagctt 120
 gaacacagtg ccgtacaagc tggtgccaac tactgccatg acctacgtga gttacacctc 180
 accagaagct tcaggcttat tgaccgctcc ttgtatgcac tggcccatgg atgccacgg 240
 cttacaacac tgaacattag tggatgttcc actttcagcg aactgcctt gatttacctt 300

agctgccgct gtagtcacct caagtgcctg aacttgtgtg gatacgtaca ggctgttact 360
gacacagctt tgcacgctat tgctcacaac tgtgggcagc tgc 403

<210> 4338
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D11

<400> 4338

ccacgcgtcc ggccggcggc agcgtggacg cccacgacgg cgtgctgtcg ctggggaacg 60
gcgacatgtc cttcgccgtc cagcccgcca agcgcttcgg gcagcgcttc tccttctgcc 120
tgctcagcgc caacagctcc cgcgacgcct ccagctacct caccttcggg cccaacccgg 180
cggtgatggg tccgggcacc atggagacgg acatcctgta caacgtggac gtgaagcctg 240
catacggggc caaggtgacg ggcgtcttgg tgggcgggga gcggtggac atcccggacg 300
aggtgtggga cgccgagagg tttgtgggcg gcggtgtcat cctagacacg agcacgtcgg 360
tgacgtcgct ggtgccggag gcgtacgcgc cggtgacggc ggcgctggac 410

<210> 4339
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D12

<400> 4339

ccacgcgtcc cagggcgccg tcggagccgg cgggtccgct ggacatcgcg cagctgggcg 60
ccaagggcga cggcaagtcg gacagcacc ccatgacct caaggcgtgg aagaacgcgt 120
gcgaggcgac gggggtacag aagatcgta tcccgccggg caactacctg acgggcgggc 180
tgagactgaa gggcccttgc aagtcctcca tcatcatccg tctcgacggc aacctgctcg 240
gcaccggcga cctcagcgcg taccaaagga actggatcga gatcgagaac gtcgagaacc 300
tgtccatcaa cggccacggc accatcgacg ggcagggagc cctgggtgtg agcaagaacc 360
agtgccagca ttcttacaat tgcaagatcc tcgcgaatag cttgggtgctg gattttgtga 420
c 421

<210> 4340
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D2

<400> 4340

attccccgggt agaccacgc gtccgaagcg atttcgaagc gaagccaatg gtcattgctgt 60
tgggtcaata ctccacgggg aaaacaacat ttataaagca ttactaaaa acaagttatc 120
caggcgctca tattgggcca gagcctacaa cggacagggt tgttgatc acattctggac 180
cagacgaaag atgcattcct ggaaacacca tcgccgtcca agctgacatg ccatacagt 240
gcctgtcatc gtccggaaca gcatttttgt ccaagttcga atgttctcag atgccacatc 300
cactgttaga gcacgtgacc ttcgtggaca ctccaggagt ttatcaggg gagaagcagc 360
ggacgcagcg cagctacgat ttcaccggag tcacg 395

<210> 4341
<211> 350
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D3

<400> 4341

gggtagaccc acgcgtccga catgcgtccg gaagggcgct acacgacgaa gtcattgcagc 60
acgatgtagc cgccactgaa tctgaacata tgcgtgcgtg taaaaccgat aagaatcgag 120
gaaaaacggg tttagacctac gggcctcatg tgcagcgac aagagcatgt gaggcgggtg 180
cctcagcgcg atacggcgat ggcagggaac acgatgtacg cacaatcgtt gcatgactac 240
atgacatgag gtaagactga tggacgactc gacgtagaca gttggtacac aaagggagta 300
gtccacagct cgacgaggta gtcagggtat cagatgcaag cgacttgctg 350

<210> 4342
<211> 463
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D4

<400> 4342

tctcggtcgc acattcccgg gtagaccacg cgtccgagga ggcacccgaa gcagcgcaca 60

gcaacagagc acacgccgca caccgccgcc gcctccgag cagcagcagc aatggcgcg 120

gccggcgctc tctgcctggg gctgctctgc ctctgggccg tgcactcagc cacggcgcg 180

aagtccacga cagccccggc cgccgcgccg gccgccgcca ccaccccgcc ggcgaccccg 240

accaagaagt cgcccgcgcc cgccgccgcg ccgcccacca ccccgccac cctggccccg 300

gccgccgcgc cgcccaccac gccggccacc ccgcgccccg ccgctgcgcc gccactacc 360

cctgccaccc tggcaccgc cgcggggccg cccaagtccg ccccaaagg gtccctccc 420

ggccccgtcg ccaaaggcca aggccacccc gccggtggcc gaa 463

<210> 4343

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D5

<400> 4343

ccacgcgtcc gagaccgatt aaccaccac cgctcgcct cgtctccgct ctcttctcgc 60

gacaaagccg gggccgttcg gcgggaggca ggggacgcac gggcaggcag ccatgaacgg 120

catcaacccc aacggcgggg tctgtcgtc cggaacatg gagagctatg cgatgtgggt 180

ggcgaccggc gtggcgtcgg ctttcttcgc gtccctcgag cgctgctcct gcatccacct 240

ccacaccgcg gaggacgacg gcgacgagga ggaggaggac ctcgaggagg cccgccgctc 300

cttctcccgc ccgatccctg agtactacta cgaccggtcc ggctcctccg cctccgtcgc 360

caagatgtga cctgaccgaa ccgcgcctcc ctccgcccaa gaaatgcgtg gtgatacgat 420

tcgtt 425

<210> 4344

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D7

<400> 4344

ccacgcgtcc aaacagctcc cgcgacgcct ccagctacct caccttcggg cccaacccgg 60
 cggatgatggg tccgggcacc atggagacgg acatcctgta caacgtggac gtgaagcctg 120
 catacggggc caaggtgacg ggcgtcttgg tgggcgggga gcggctggac atcccggacg 180
 aggtgtggga cgccgagagg tttgtgggcg gcggtgtcat cctagacacg agcacgtcgg 240
 tgacgtcgct ggtgccggag gcgtacgcgc cggtagacgg gcgctggac aggcacctgt 300
 cgcacctgcc gcgggtgtac gagctggagg gcttcgagta ctgctacaag tggaccttca 360
 ccggcgacgg cgtggaccgg gcgcacaac 389

<210> 4345
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D8

<400> 4345

accacgcgtc caatcacgac aagatggcgt gcacaaaca tgcatgaga gccttggtcc 60
 tcctggtcct cttctgcac gtgcatggtg agaaggaaga gtcaaagggc atcgatgcga 120
 aagcgtccgg gcctggtggg tccttcgaca tcaccaagtt gggcgctcc ggcaatggca 180
 agacagacag cacgaaggct gtgcatgagg catgggcac gcgctgcggc ggactggga 240
 agcagacaat cctcatacc aagggtgact tccttgctcg acaactcaac ttcacaggcc 300
 cttgcaaggg cgacgtgacc atccaggtg atggcaatct gctggcgacc acggacctaa 360
 gccagtacaa ggaccatggt aattggatcg agatt 395

<210> 4346
 <211> 454
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-015-Q1-E1-D9

<400> 4346

gtaccggtca anaattccc ggccgacca cgcgtccagt gggatcgagt tgtttctactg 60
 cacgagcaca tcctccggcg accaccggcc tcctctccg tcctctagcg accgaccaac 120

gagaatccac caaggacgat ggccatcgct tgacgatgga atgcaccact cccgtctcct 300
ccagtagccc ttccactcgc aagaagcgcg gggcggttcag cctcttcagg gcgatgttcc 360
tgtccttcgg ccggagcgac gacagcatga agaagacaga cgacgacacc acgagcccca 420
ggaagagagc catcgcggt gctga 445

<210> 4349
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E11

<400> 4349

gtaccggtca agaattcccg ggtcaacca cgcggtccgat gccgcttcca ggagcctggt 60
gtcgcagaga aggagttctc gccggccaac gccgggtacc tgatgaagcg gatcctgtgc 120
aaccgcttca cctcctcggc ggccggcgac gacaagcgac cgccggcgga cgccgccgag 180
gaggagccgc tgccgccgtg gctgacggag gaggacgtgg gccacttcgc gtcggagttc 240
gagcggacgg gcttcacggg gcccatcaac tactaccgca acatggaccg caactgggag 300
ctggcgggcg cgtggggcgga cgccaaggtg cgggtgcca ccaggttcat cgtcggcgac 360
ggcgacctca cctaccacta cccgggcac caggactaca tccacaaggg cgggttcgag 420
gccgacgtcc cggggct 437

<210> 4350
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E12

<400> 4350

ccacgcgtcc gacacgcgtc cgcccacgcg tccgccacg cgtccggcct gttctcatcg 60
gccgctaaga gatgtagaaa gtgcaagaag ttctccgca gcgcggggcg gtgctgtgc 120
tcgccgtcgg cctcctccgc cctgctggt ggtgtgcgc gcaacgaaga ggcgtcgacg 180
tcggcgctgg cttccgcgcc agatggcaag aaaaagaaga ggtggaggaa gagaaagttc 240
tgagaaaaga agaagaaggc caagaaggag agcgacgatg gcagcggcga gctcgtggat 300

ctcgtcaaca gcttctcggc caagtccgac gtgtgcaaga acgtgaatgc ggccgaggag 360
atcctacggg gctgcaacca gaacatgccc agcaaggcgc tgacgttcag ccagctgggc 420
gccgcgaacg ac 432

<210> 4351
<211> 418
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-E2
<400> 4351

attcccgggt agaccacgc gtccaaaaaa acttggtaga agcatatgct caatttgtga 60
aagattatta cattaataaaa atggagacac caccatcctc gtatgatcga gaatatctga 120
aggaaacaac tccacatgat tctagtaagg ttctaggctc tgggtggtcc aagtttgcag 180
tgaggttgcc tactttcaag tggcacccaa aaatgacagc gttcgttctg caaggatcaa 240
tacgaggtag catttggacc tatgcagaca tgtctttggg gaaggcggtt atcccgatgt 300
gttcatgacg aacttgtatt atggaggcac aagaatcgct gcttctaaaa tcgtgtttac 360
aaatggctcc caagacccat ggcgccatgc ctccaagcag aaatcatcga aagacatg 418

<210> 4352
<211> 410
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-E3
<400> 4352

gtcgacaatt cccgggtcaa cccacgcgtc cgacctccac caccaccacc aagctcaaca 60
acagccagct cgcgaaaata atgaagagcc gcagcatggc atcatcggcc gcgtctttgg 120
tgctagccct cgcgctagtg gcggccaccg cccacaggt agcggaggca aagaagaaga 180
gagcggcgga gagcggcgag gcggcggagg cgaagaagat ccaggacgac ttctgctcga 240
cgctgtgcga gggcaagaag gggacggacc tggtcgtgtg caaggagtcc tgcgcgctct 300
cccagcagtc caacctggtg ctgtacggca ggatccagt caagggcaag tgcaccgagc 360
agaagggcat cacggcgccg gccatgaagg tctgccagga ggagtgcgac 410

<210> 4353
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H7

<400> 4353

ccacgcgtcc acccacgcgt ccggcagtc tctcctccat caccaccacc aagctcaaca 60
acagccagct cgcgaaaata atgaagagcc gcagcatggc atcatcggcc gcgctcttgg 120
tgctagccct cgcgctagtgc ggcggccaccg cccacaggt agcggaggca aagaagaaga 180
gagcggcgga gagcggcgag ggcggcgagg cgaagaagat ccaggacgac ttctgctcga 240
cgctgtgcga gggcaagaag gggacggacc tggctgtgtg caaggagtcc tgcgcgctct 300
cccagcagtc caacctggtg ctgtacggca ggatccagt caagggcaag tgcaccgagc 360
agaagggcat cacggcgccg gccatgaagg tctgccca 397

<210> 4354
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H8

<400> 4354

gggccgaccc acgcgtccac tggaatggga tctgatctct ttgggtcata cgcagagtct 60
tcttgtgtgc ccttgttgtg tgcgtctatt tcatctttcg gaatcgacca tgatttcact 120
gggatgtgct acccactcct tgtagctct gttggatca ttgtctgctt gatcaccacc 180
ctttttgcta ctgatttctt tgaagtcaag gctgtgaaag aaattgagcc tgcacttaag 240
aagcagctca tcatctccac cgtcctgatg acttttggtt ttgctctaag cagctgggtg 300
gcccttccag ctaagttcac catctacaac ttcggtactc agaaggaggt ttccaactgg 360
ggtttgttct tctgtgtttc aattggctcg tgggctggtt tgattaatgg gtttgtcaca 420
gaatactaca cta 433

<210> 4355
<211> 298

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-A2

 <400> 4355

 gcgcatgtat gtgcgtaggc agcctatata catgttacat gtatgtataa tacaactata 60
 tatacatgaa gccttgaact acagtgtacc atgcaggaag tagaatgcta tgatatgagg 120
 catcctgttt ccaaacatat aaaaggagga tgaggaggac gaaactgagg ctacttacac 180
 gtacgtacct acagcacacg cgcaaatac attcacgaat cacgaatcga gctgagaacg 240
 gcatttaatt tgcttcntct cgategattc gaccctcgt ttccatgcgc gcgctcga 298

<210> 4356
 <211> 212
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-A6

 <400> 4356

 ccacgcgtcc acggacgcgt gcggggagtt agcgattaga aatatcgcgt gaggtcagta 60
 gagccagaag aatgcgcagg cagaagatag aatcgggtaa agatatgagt aaatggacga 120
 agggcaaggt gacgagcttt tagagcaggt gaatcatacc ttgcttgaca gatgtctcga 180
 gcaggaatca tagatcatgg tagactacga ga 212

<210> 4357
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-A7

 <400> 4357

 ggtcaggaat tcccgggccg acccacgcgt ccgcggacgc gtggggcccg ccggggatca 60
 gcgacgtcgt ctccggcgtc tcgttcctcg ccgatccga atactaccct cccaaggca 120
 cgggagccga gcagaaggcc acagccacag gtcgagagag taaaccaag gaggatacta 180
 cagacaagga tagcagtcct cataaggccg aaatgatcag ggcagacgac gaaacgaagc 240

atagatgatg accgtagggg gaagctaacc acgggaaagg gaggaacact gcagagctgt 300
ctgtctgctc tcttgaatct tctttttgta aagcgtacac cacgtaggca ggatgtaaca 360
acaacattca aggagttatc ttgactga 388

<210> 4358
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-A8

<400> 4358

aggtctagaa ctcgcgggcc gacccacgcg tccacggaca cgcggggcag gccggggatc 60
agcgacgtcg tctcggcgct ctcgttcttc gccgatccgc aatacgacct tccccaaggc 120
acgggagccg agcagaaggc cacagccaca ggtcgagaga gtaaacccea ggaggatact 180
acagacaagg atagcagtcc tcataaggcc gaaatgatca gggcagacga cgaaacgaag 240
catagatgat gaccgtaggg ggaagctaac cacgggaaag ggaggaacac tgcagagctg 300
tctgtctgct ctcttgaatc ttctttttgt aaagcgtaca ccacgtaggc aggatgtaac 360
aacaacattc aaggagttat cttgactgac aaagaacaag aaatggccgg ccgctccaca 420
gga 423

<210> 4359
<211> 315
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-A9

<400> 4359

gtcgaccac gcgtccgact acactcgtcg tcgtctcact cacgggcctt tcagacctct 60
ctcgagcaga taagtctcgt ccgtgtccga cattcagaag ggggacatga atttcgctgc 120
catagtctcc attcctgcga ctaccttcgc catcagcttc ttcgtcctca tcagtgcctc 180
gattggcacc gcagtctaca ccaatctcct cgactacgtc atccagggat gtgtctactg 240
ctacagctga ctcaccggat tcgtgatcaa tgtcagcaac tacatcgctg gcaccatcgt 300
taggctgtac tgcac 315

<210> 4360
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-B1

 <400> 4360

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 ccgacgtagt agcatgagaa tttctaattt ttccatgaaa agaggccctt caatggccat 120
 gagagctcct tcagtagcta tcagagctcc ttcaatatct ctgagagggtc cttcaatgtc 180
 ttcaagagca tcttctgtgt ctgtaaagga agaccaaatt tccccaaaga aatcagacga 240
 ggaaacggaa tcagtgttgg tgaagctgag cgcccgtcag atcacacttt tgctatcatc 300
 catttgggct caagcaacat cncctgaaaa tactcctgtg aactatgaag ccattgctca 360
 tacttacagt ttgcttc 377

<210> 4361
 <211> 123
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-B11

 <400> 4361

ctctggcgcc atagtcggcc actactgcac catttgggcc caaaacagca tattcccaga 60
 gttcaagcca gacgagatga cccatatcgt taaagacatc gacgagcctg ggtttctggc 120
 cgc 123

<210> 4362
 <211> 343
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-B3

 <400> 4362

cgggtcgacg cgcggtccg cccacacgtc cggccgtaca aggactacaa ggagtgggtg 60
 tggaaagtcgc agggcgacgt catgatgaac ggcgccttct tcaacgagtc cggcggccac 120

aacgagcgca agtacgacag gttcgacttc atcccggcca agcacggccg ctacgtcggc 180
cagctcacgc gcttcgccgg accactcaag tgcacgtcgc gccagccgtg ctagtagaca 240
gcggcccggc cgggcacata ctctcttcc tatatacatc ggatttggat gggcggcata 300
tatgtacgtg tgtgtaatat attattacta catcttgtag tat 343

<210> 4363

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B4

<400> 4363

cggctccagaa ttcacgggtc gaccacgcgc tccaggccct ggggctggga acgcgcgcgc 60
aggcattccg ccggccttca ggaacggcgc cggcgacggc gggtagaggc ccgacttcgc 120
cgacggcaac cagtacacgc cgcccaaacg gaagtgggcc ttctgtggct gctgaatcga 180
agctcgctgt gctgctgtgc tgactcgaac ggagaacgga tcgtgcagca gctcaagtga 240
tccaggatga tgggagcgcc gagacacgat ggaaggcatt aattatttca gccatgggtg 300
ttcgcttgc tttaaccttt tgctcatctc taccgaggaa cactagttcc atcgggtaac 360
tgaacctgca aatcttcatg atgaaactgt cgcacatcaatt ggttcc 406

<210> 4364

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B5

<400> 4364

ccacgcgtcc gtgcaagccc gacgcggcgc cgctgggtgt gacggcgacc gacctgtgcc 60
cgcccaagga caagtgtgtc aagccgccgc aggagcactt cgacctcagc atgcccgcgt 120
tcctccagat cgcgcaggag aaggccggca tcgtgcccac ctctatcgc aggggtggcgt 180
gcgcgaagca gggcggcatc cggtagacca tcaccgggaa caagtacttc aacatgggtga 240
cgatcaccaa cgtgggcggc gccggcgaca tcgcggcggc gtcgggtgaag gggagcaagc 300
gcgtcaagtg gacggagatg aagcgcaact gggggcaagt gtggcagacc ggggaagacc 360

tcaactggca gtccttgacg ttccgggtga tgactagcgg acaacgcaag ggcacctcat 420
ggcacgttct ccccgctgac tgga 444

<210> 4365
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B6

<400> 4365

ccacgcgtcc gtcctctctt gccgggtcccg aataaagagc agcagcgcaa gaggtcggta 60
gagcgagaag aaggcaatgg cggccgagag ctctcttttc acctcggagt ccgatgaacga 120
ggggcacccc gacaagctgt gcgaccaggt gtcggacgcc gtgcttgacg catgcctcgc 180
gcaggacccc gacagcaacg tggcctgcga gacctgcacc aagaccaaca tggatgatgg 240
gttcggcgag atcacgacca acgcgaccgt ggactacgag aagatcgtgc gcgacacctg 300
ccgcgagatc gggttcacct ccgacgacgt gggcctcgac accgaccgct gcaaagtgc 360
ggtgaacatc gagcagcatt ccccgacat cgcgcacggc gtgcacgggc acttcacgaa 420
gcggcccgag gagatcggc 439

<210> 4366
<211> 343
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B7

<400> 4366

ccacgcgtcg acccactagt gcttgagacc tgcgttgta accacccatc aaggttgggg 60
ccgccagcag gttcagccgt tcgtgttcat gctaaaacga gagaaggatt gcattgtctc 120
agggagctgt cataatcttg tttctcatct tcgcaacaca ggtgggaacc atcgatgcca 180
acatgagagt agccatgccg atgcatgcca taataatgga gaaagcgaaa tatcatgaga 240
ctgagaataa agacgagaaa agcacagaga aagaagagag tcaatgctta tcgacgactc 300
tccagttata gggtttctgc ttcaacagct acagatgcac cga 343

<210> 4367
 <211> 287
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-B8

 <400> 4367

 ccacgcgtcc accagatgtc gattgagacc cgccttgaca agcaatcata tacgtttggg 60
 ccgcaaacac gtctcagctt acgatgatct tgctcaaaca atacaatgag ccattgtcac 120
 acgaagctgt cataatcgtg agtctcctca tcacagcaca cgtcgtaagc agacgatcaa 180
 gcatgggagt actgcagctc atacatgcct ttgtatcaga caaagttact gattatgaga 240
 ccgagtcgac ggacgatacc accactatta aagaagagac tcaatgc 287

<210> 4368
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-B9

 <400> 4368

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 tctgggctga aaacacatgt ctgctagttc atcaagccta agaccgagac taacgcacgc 120
 tatggtctag aagaattctc aataacgctg ctttcttgcc gtgaatacga cactgcattg 180
 gaacgacgct gatgatgagt ccccgatagc tagaccaggt ccaactgccac actgcatcaa 240
 aggatcttgc tgcttctgtg gccgaatcaa cggacaagcc ctcgacattg gaacccgaga 300
 cgatggtatc accactagat actccagcat agtagatggc aagctctgag gagaccacga 360
 cgagccagc taatgccgtg aaatctgcca agtgaagac caacgatgaa agg 413

<210> 4369
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-C11

 <400> 4369

 cgggtcgagt cacgcgtccg caaccacatc atcatcgacc agtacttctg cccccaaaaa 60

gtctgccccg ggcagcgaag caactcctcg catgtctcca tcaagaacgt taactttcgc 120
aacaactccg ggaagttggt caagcccgaa accgttcagc tgctctgctc cgagacgcag 180
ccgtgcagcg gcgtctcgct catcgatgtc aacgtcgagt acgccggcaa gaacaacaag 240
accatggctg tgtgcagcaa cgccaagggg aaccgccaag gggaagcctc caggccctgg 300
attgcctcgt ctgatcgatg accttgcatt tgcattgcatt cttcttccgt ttcacttttc 360
catattctat tgcgttccag ccaagcatcc tgtttccttt ataaatatat atatatatat 420
a 421

<210> 4370
<211> 448
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-020-Q1-E1-C12
<400> 4370

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tgtttcacaa ttttggtgct agagatcccc aaactgccta actcactggg gaaggtttct 180
gaagggtgtg attatagtaa acagcagcaa aatacccaac aacgttactg ctaaaagcag 240
ctgctcctgc ttgcgccttt agaatactag ccgtaaaaca gcaaaaaccc gcacatctgt 300
gtcagcagtt gggatgtgag ctactctaaa caacaaaçaa ctgtgaacag tccaaggcag 360
gacctctaca atcatactgg gcaagcgctg agctgtgggg agaaaatgtc agcacatgcc 420
caagaggaga caatgcacac gtttagta 448

<210> 4371
<211> 391
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-020-Q1-E1-C3
<400> 4371

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tcttctctccc cgggcatgng aggaagtagc tgtttccccc tatgatcggt gccgcccgtan 120
 tgctggacaa caatggcgct gacgcggtct cctgcactgc catccctagc gtaacaataa 180
 gcctagagga gaaagaaaat atcaatgggg atgttccac gatcacctcg gccgcaagca 240
 acgatgaaga tgcgttggtc agtgctggag aatccaccaa ggacgatggc catcgcttga 300
 cgatggaatg ctccactctc gtctctcca gtagcccttc cactcgcaag aagcgcgggg 360
 cgttcagcct cttcaaggcg atgttctgt c 391

<210> 4372
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-C5

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 gatgcgaaag cgtccggggc tgggtgggtcc ttcgacatca ccaagttggg cgctccggc 180
 aatggcaaga cagacagcac gaaggctgtg caggaggcat gggcatcggc gtgcggcggc 240
 actgggaagc agacaatcct catacccaag ggtgacttcc ttgtcggaca actcaacttc 300
 acaggccctt gcaagggcga cgtgaccatc caggtggatg gcaatctgct ggcgaccacg 360
 ga 362

<210> 4373
 <211> 353
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-C6

<400> 4373
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 gacactcta aatccaaaca cagtagatag tatctcatag ttgcatttcc agactaacc 120
 tattctttct gacatccact ttagtctgtt catgcctcag ttgctgtgcg gcttttctact 180
 tcatcagcag tcatagtcgc cagttgcgac agcattgaga gcaacctatt ctccgtatat 240

aacggttttt ccatgtatag catatgccag aagaagccca aattcgtccg tggagtactg 300
aagcaattgt gatgctaagt atacatcatc tgagtatgat tctcaacaac cga 353

<210> 4374
<211> 237
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-C7

<400> 4374

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agcgaatacg aagcgtgtac gacggtacag aggctcgcat gctggtagtc ctgtaggaac 120
tcgagacggt ctgacaggca gatgactcgt tgcagtcctg cgattctaag gtgacttaca 180
ggacaagatc actgatgggc gtgacttaca aggtcatcct cagcaacggc gacttcg 237

<210> 4375
<211> 433
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-020-Q1-E1-C8

<400> 4375

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gcagatctcg agaagttgca gctccccaca atggaaggtc tggctaaaaa actaaaaaag 120
aactctggga gcaagatcga gtctgtctatt gttggtacgt acgtgctgtg gaacagctaa 180
ccctttgtgt ctgttgaaat tctgaaacct gactgctata tgcttggcag catatatcag 240
tctgctattg ttgcatgtca tccatcagaa gcacctacta tgactgccag ctggtttaac 300
tccaagtcag gaaagaagat tcctttgaaa tcagtcactt caatcgtcga tgggctaaag 360
aaatcgtaca ttgagaagtt gatgcccttg gaaaaaacct atcagttcca tgacttcgtg 420
tctcncttgc tga 433

<210> 4376
<211> 435
<212> DNA
<213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-D11

<400> 4376

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cttcacggac gccttctggt cgcacccggc gctcaacggc accttccacg ggcgcgccc   180
atgctacttc aacacgggcg tcatggtcac ggacgtcgac aagtggcgcg ccggcgggta  240
cacgcgccgg gtggaggagt ggatggccgt gcagaagcgg cggcggtatc accacctcgg  300
ctcgtcgccg ccgttctctg tctgtcttcgc cggccacatc cgggcggtgg accaccggtg  360
gaaccagcac gggctcggcg gcgacaacgt cgagggccgc tgccgggggtc tccatccggg  420
ccctatcanc ctctt                                     435
  
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<210> 4377
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-D2

<400> 4377

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gcagtgccgc cccgaggcgc tgggtgcagca ggtggccgcc gcggcgcggg aggccggcgt  180
gggcctggcc ggcgagaacg cgctgccgcg ctacgacgac acggcgcacg accaggtggt  240
ggccactgcc gccgacaggg ccgccgatga ccgcatggtg gccttcacgt acctgcgcat  300
ggggcccgcac ctgttccagc ccgacaactg gcgccgcttc gccgcgttcg tcaagcgcat  360
gacggagccg ggcgcgcggg aggcgtgccg ggagcaggtg gagcgggagg ccgagggcgt  420
cgcgcacgcc acccagcccc                                     440
  
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<210> 4378
 <211> 361
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-D3
 <400> 4378
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 acctcatcac cgaggcgtcc ggcaccatgt ccgcaggcat cgccctgcc aacctcaacg 120
 ccggagcgc ctcctacggc gcgggcggcg cttccggggg ctccgccgat gccccgcgcg 180
 gcgcctccga gggccctgcg agcgccagcg gcccgctctg tgacgacgcg ccggcgtccg 240
 gtgctggtgc cagcgcgtcg gctgctgatg ctcccggggc ggcngnctca tccggtccct 300
 ctacgcgacc agcgccatcc tcgtcgtctg agtcctccgc cgcacatgc ccatcttctg 360
 a 361

<210> 4379
 <211> 374
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-020-Q1-E1-D5
 <400> 4379
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 caccatcga gggtggggcc gccagcaggt tcagccgttc ctgttcttga taaaacgaca 120
 taaggatggc agtggttcat ggagctgtcc tattcttggt tctctcttc gtcgcagcat 180
 aagtgggaaa cagcgatgcc agaattgggag tagccatgct catgcatgcc ttgataatgg 240
 agaacgcgaa acagcatgac acggataata acgaggagaa cagcacggag aacgaataca 300
 gtcaatgctt atcgccgaat ctccagttcg agggcttctg cttcaacagc gacagatgcg 360
 ccgaggtgtg catg 374

<210> 4380
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
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 <400> 4380

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aggagtgggg atgaagcaat tcagtaaagc tgcaaggag ctcattggca tgcttcagaa 120
gattgatggt gacaattatc cagagaccct gtgccgcatg ttcacatca atgcaggcca 180
gggattccgg cttctatggg gcaccgtcaa gagctttctt gacccaaaga cactgcaaa 240
gattcatgtt ctgggtaaca agtatcagag caagcttctc gaggtgattg atgctagtga 300
gttgccagaa atttttggtg gaacctgccg atgtgaacgt ggttgcata aggctgacaa 360
anggccttgg aaggacccccg aatcatgaa aatgggtcaa agtggtgatg ggaggtgtgg 420
atcactcgtt ac 432

<210> 4381
<211> 305
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-020-Q1-E1-D7
<400> 4381

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tcgtcttcgc agcacacaca tgtttaatag ttccaggac tgggattgct cgattaactc 120
aactcatgct gacgagcatg tatgccccct gtggtactgg ttccacatgt gtgcaggagt 180
gcttaaccgg cttctaggcg atgcctacga gacctgccg aagtgtcaca gtcagcgta 240
ttgattgata gtgagagcat ctacagcacg ctgaagctt gatgacggtg attgttactg 300
ctcag 305

<210> 4382
<211> 431
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-020-Q1-E1-D8
<400> 4382

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tggtcgtcga tgcgggcaca ggttgcatg gctgtggtgt tggtgttctt ggtgagcggc 120
gcatggtgcy gtcctcccaa agtcccccca ggcaagaaca tcacggccac ctatggcaat 180

gactggctgg acgctaaagc gacatggtat ggcattgccga caggtgccgg tcccgaacgac 240
aacgggtggtg gctgcgggta caaggacgtg aacaagcccc ccttcaatag catgggacgca 300
tgcggaaca tccccatctt caacgatggt ctgggttggtg ggtcctgctt cgagatcaag 360
tgcgataatc ctgtggagtg ctggggcaac cccgtggtgg tgcacatcac ggacatgaac 420
tatgagccta t 431

<210> 4383
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-D9

<400> 4383

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catgcacacc gaagtacgac agtatcatca tgctcatctc gctgaagatg gacatcatca 180
accacggaga cgtgtccacg gtcacgcagt ccaagtcgaa gttcttcgac atgaacatgt 240
agcgctacaa tgacatgcca atcaaagacg tcaccataac ggcacccggc gacagatcca 300
acagtgtgtg aagtcatatg tgcgactcat ccgggatcac gatcaccaac acagtctttg 360
gcat 364

<210> 4384
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E11

<400> 4384

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tccaataata gtaacaacaa agcaaagggc ctctccccgg agtaattgct ttggctcttc 180
tcctccaagc cataagatat ctaacaattg gtgactcgcc ttaattagtt cgctttgctt 240
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ggacttttga atgtggaatt tttttttccc gtttctgtac ttttcctaga agatgaagta 360
atgaactgg 369

<210> 4385
<211> 221
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E2

<400> 4385

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tttttttcgg tttttttttt ttttattgtt tttttttttc ccacgcgtcc gccacgcgt 120
ccgccgacga tggcgtcgaa taagacagtc ctcatcgctg cggggatgct tctcatcagg 180
ctcgtgctgg aggctgcccc tccggggggc gctctagagg a 221

<210> 4386
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E3

<400> 4386

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tacggctatt ttaaccctcg gctcctgccg acgccgact cgccccggc ctctctccgc 180
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gcgaagatga gggagatcct gcacatccag ggaaggcaat gtggcaacca gattggcgcc 300
aagttctggg aagtgggtgtg cgatgaacat ggcatcgacc ctaccgggcg gtacactggc 360
aattccgacc ttcagttgga gcgtgttaat gtccactac 399

<210> 4387
<211> 173
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E4

<400> 4387

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tgacatgcat ctgctgcatt gctacacgtt cgttcgtgtt cacaactacg ctttgttctt 120
tcgttcaaaa tcaccgaccg cagcttggtc agctagtact ttgttatttg gcc 173

<210> 4388

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E5

<400> 4388

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ccatgctagc ggtggccgcc gatgtcgcca acgccggcca cgccaagccc ctgacgcctg 120
gcgggcgcgt ggtacacgac aaccacggca agttcacggc cgggccgtgg aaaccagccc 180
acgcgacctt ctacggcggg cgggacgggt ccggcaccac ggcgggcgcg tgcgggtaca 240
aggacacgcg cgcgccgggg tacggcgtgc agacggtggc cgtgagcacg gtgttgtttg 300
gcgacggcgc ggcctgcggc ggggtgctacg aagtgcggtg cgtggacagc ccc 353

<210> 4389

<211> 317

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E6

<400> 4389

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gcaggatact cacactgctt agaggtgaca aagtccgcat acacttacag gcacatgaat 180
aaatgagaag cagtcagcgc ctgttacgac gaagagccat accatccgtt tcgttgtagt 240
tgtagctgga tacgtcagtt ttgcactatc gaacgacaac taagtcgaag ctgatagagt 300
aagtgtaca cgtttat 317

<210> 4390

<211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-E7

 <400> 4390

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 tggactgcaa ggccgggtgt gacgatgtca cgggccact ccacatgaac atggaggact 180
 gcatgaaaag gtgcaaggac atcgctgcta agcaagggcc tagggaccct tacaaggata 240
 acaaacttga catcccatga actagttaat gtcctatat catctgccta tccatgcatg 300
 cattgcattg cgtatgcaca ctgtgctga ctgccacac agttcgacaa tacaccggat 360
 ctcgatggga ttgtaatcgt gtccactcga tcgagagatc gat 403

<210> 4391
 <211> 376
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-E8

 <400> 4391

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 ctccggcgac cgccatggac tgcaaggcct ggtgtgacga tgtcacgggc cgattccaca 180
 tgaacatgga cgactgcatg agaaggtgca aggacatcgc tgctaaacag gggcctacgg 240
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 gcctatccat gcaagcattg cattgcgtat gcacactgtg cgtgcctgcc catacagttc 360
 gacagtacac cgatct 376

<210> 4392
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-E9

<400> 4392

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cttcgaggtg acaccggcct ttcacgtcgt cgaggtgaag aagtcggcag gcgacacgct 120
ggagtatgag atgttctgca gcaagggcct aagaccttca ctcagcgaca tctgctggag 180
cagccgatct gaggagaaca tggctccttc agtggttcag ccatcacaat tggagccatc 240
ctcttagacc gtctccgaca gtttactcac ccctcttagt cgattgttat ttaagtgcag 300
tctcttcgga gatgcaatta cagtccatcc tctctttctt tcccccttc tcaaagagct 360
aggaccttgc tcgactgagc atcaggctgt anggctcttt gtga 404

<210> 4393

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F3

<400> 4393

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tggttccatg gctggaacca tacatgaaac tttccttgca atatacagtg ggaaacttct 120
acagagcttg gctgtagcaa ctagccaagg gtcattcttg tcggtggatc agattatcta 180
caatggaatc ggctttacaa ttgctgcaac ttccactgct gctatcacta tttatgcaaa 240
gaaagcgctt caaaagctcc aagcggagga cgagatattt tgagaggtcc aaggccagga 300
tcaaaccctg aacgctagtt ttctttcagg tgtactatat atgaacagct ggtactaatc 360
tggtttcctg tgcgactac cggactgcta ctaacatcca tc 402

<210> 4394

<211> 436

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-020-Q1-E1-F4

<400> 4394

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 ctctgcaact acggccccgc cctcctcacc ggcgggcgga ccactctcgc cgcgctcgtc 180
 gtctgtctcc tcttccactt tctgcttgct atgcttttat ggagttattt ttctgtggtg 240
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 gaaactgctc ctctcactag ctcaagattc agtagccaga tgaattcaca gcaatctgtg 360
 gctcttgga atacggcaaa tccaaagggc aaggtactgt angaaatgca accagttgaa 420
 gcacctcggg gccaca 436

<210> 4395
 <211> 440
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-F5

<400> 4395
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 ctgtgggatg ctaagcctgg tctagctact agattatgaa ctctctgctg atctaatagc 180
 atttctacaa gaattctttt gctggaaggt ttattagtta ttgcaacaa tgaaggaaca 240
 tctaattgctt aatattgatg acctaaagcat tcttgagcct aacgaggtca ttgggacagt 300
 caagaataaa tcatctgggg aaaccattgc acatccaacc tccatggctc aatgcatttt 360
 agcagtggga gaaagcatgg tttctgaagc ggaacctctt ctgcaagtgg tggagtgtcg 420
 catttgtcag gangaagata 440

<210> 4396
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-020-Q1-E1-F6

<400> 4396
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taggtccgcc cgggcggggc ggagccgcgg aggcgcggac cgcggagcgg gagcctgacc 180
catatccatc cctccggggc cggagaggag ggggaagcag agcagcgggc gcggcggaca 240
tgacgccgat gcggctggtc gtccgagcct gcaccgcacc ccccatccgc gtactggaag 300
tcgaggaagt cctggaagct gctctccctg tacattgctg gggtcacctc gtcgaccagc 360
tcctcgggcg agcagacctt ctcgtccttg gagagactat ggatgctggc aatggaaatt 420
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<210> 4397

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F7

<400> 4397

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ccaccatggc gcaacgagcg gtggccacga tgacgactaa taagcccctc gtcctcctcg 120
cactggcgtc cgcgtcctt ggtgcgggcg cggccgcgcg gaacgcgccc ggcggggcgt 180
tcagcaactg ggtggcgatg aaccaacaga gctacgcgt gtacgcgcag aagtccgtcg 240
gggacggggg caaggagccc ctggacaaga agctgtcaga ggcggagaag atcaaggta 300
cctacgtggt ggaccccagc ggtaacggtg actacaccag catcaccgcg gcgctggagg 360
atatcccggt gagcatcacg aagcgcgtga tcctggatat caagcccggc gtcagttcc 420
gcgagaagct gttcctgaac atc 443

<210> 4398

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F8

<400> 4398

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ggagagcaac ggcacctgga agttcccagg catcggcgcc ttccagtga acgacaggta 120
catgcgtagc cgcctgcagg cggcagcgga ggcggccggc aagcctgagt ggggccacgg 180

tgggccgacc gacgctggcg gctacaacaa ctggccggag gacaccgtct tcttccgcgg 240
 cgacaacggt ggggtggagca ccgagtacgg cgacttcttc ctgtcgtggt actcgcagat 300
 gctgctggag caccggcgacc tcacccctgtc gggcgccacg tccgtgttcg gcgccgcgcc 360
 cgtggaggtc tccgtgaagg tggccggcat ccaactggcac tacggcagcc ggtcacacgc 420
 cccggagctc accgc 435

<210> 4399
 <211> 323
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G2

<400> 4399

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 agtgttgata agtcccacta taatgagtgt tttttaaac ccattatagt gatttgagag 180
 gggattttta gattatgtca ggcaatataa ccgtgcgttc tcaattgggt caaccccaac 240
 caacgtccct tctcccttcc cgaagggttg atcgtccttg gtccttttga aagaggttac 300
 ttccccaaag gatacaaggt tgg 323

<210> 4400
 <211> 457
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G4

<400> 4400

ggtcaagaat tcacgggtcg acccacgcgt ccgcggatac gtcgcccgtc gaggcgctgc 60
 agaagatggt tcaaggcaag ttcaggcacc tgccggtggt ggataacggc gaggtggtgg 120
 ccatgctgga catcgccaag tgccctctacg acgccatctc ccgatggag agggcgctccg 180
 agaaggggaa ggcggcgatc gccaacgtcg cggctggcga cgacaagtac tccatcgtcg 240
 aagctctcaa ggagcaaagt ttcaagccct gcttgtctgc cattattggc gaagactcaa 300
 cagtcgtcat ggtgtcgcct ggtgattccg tccttgcagc taccaagagg atgggtggaag 360

cgcatgcgac ctcagccgta gtggccgtgg ggagcaagcc gcaaggcatc ctgacttcaa 420
gggatatctt gatgcgcctg gtcgctaaga acctgtc 457

<210> 4401
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G5

<400> 4401

ccacgcgtcc ggtgatttga aatacttggg aataaatagt tcgtgaatcc ctgaagcgtg 60
catatatata ttcttgccaa gataaaggta atggagtcgt cacgcagggt ccagccggcc 120
gtcatcctgc ttctcctgct catttgtgtcc accgatatgg cacaggcaag ggaatgcgag 180
aagtacagtg agcgatttgt tggggcatgc atgatcgag acaactgcgc caatgtgtgc 240
cgcggtgagg gcttcttggc cggcagggtgc agcaccttcc gccgccgtg catctgcact 300
atgcagtgtc aaacaagatc gctcgatcgt tcgccatgca tcgacaacct attcttaata 360
acgttcatta atctcgctct atttatgacg aatgtcatgt atgtcctggt gactgtcatg 420
tatattctga tgactgtcat 440

<210> 4402
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G6

<400> 4402

ccacgcgtcc ggccaccctc gtctcaccct cctccctca cacaaataat aaggaaaggt 60
cccgcccttt tcctccgaca tccacaaggg gggaggggaa aacacgtaca ttcacccggc 120
ggcaataatg gcctcgggtc cggctccggc gacgacgacc gccgccgtca tcctatgcct 180
atgcgtcgtc ctctcctgtg ccgcgggtga cgaccgaac ctccccgact acgtcatcca 240
gggccgcgtg tactgcgaca cctgccgcgc cgggttcgtg accaacgtca ccgagtacat 300
cgcgggcgcc aagggtaggc tggagtgcaa gcacttcggc accggcaagc tcgagcgcgc 360
catcgacggg gtcaccgacg cgaccggcac ctacacgatc gagctcaagg acagccacga 420

ggaggacatc tgccag

436

<210> 4403
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G7

<400> 4403

ccacgcgtcc agccaccctc gtcgcaccct cgctccctca cacacatgat aaaggaaggt 60
cccgcccttt tcctccgaca tccacaaggg gggaggggaa accacgtaca ttcacccggc 120
ggcaataatg gcctcgggtc cggtccggc gacgacgacc gccgcccgtca tcctatgcct 180
atgcatcatc ctacactgtg ccgcggtga ctaccgaac ctccccgact acgtcatcca 240
gagccgcatg tactgcgaca cctgcctgct ccgggttcgt gaccaacgtc accgagtaca 300
tcgcggggcg caatgtgacg ctggactgca agcacttc 338

<210> 4404
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G8

<400> 4404

ccacgcgtcc gcgccgtggc acggcctcga ggccggcgac gacgcaggcg cgaggcgccc 60
gaggggccgg ccatgacgtc gtccgtgcgg cagtgggtggc gccgcgccgc cgctgcgctc 120
aaggacagga ggagcctgct cctggcgcg ctcgccccgc gccgggcccgg gtcgtcgtcg 180
tggcaccacc gggagctgga ggcggccgtg atccgcgcga cgagccacga ggatcggtgg 240
atggactacc ggagcgccgc gcgggtgttc gcgtgggcgc gtcgtcgcgc cacgttcac 300
cggcccgtca tgtggggcgt ggcgcgccgc gcgcggcgga cgcggtgctg ggtcgtggcg 360
ctcaagtcgc tcatgatggc gcacggcatc ttctcgggt cgggccgcgc gccgcgcgcc 420
ggccgcgtcc ccttcgag 438

<210> 4405
<211> 280

acctcaaggc cgccttctg gtgtcgggtg tgttctggg cctgtccacg gtggtgacca 360
tgatcttcgc ccgcg 375

<210> 4408
<211> 240
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D11

<400> 4408

cgcccaggcc gatacaacac tctagaggca gtcgtatcac acagccagcg ggcagccatg 60
agggagatcc tccacatcca gggcgggcag tgcgggaacc agatcggggc caagttcttg 120
gaggtgatct gcgacgagca cgggatcgac gccacgggcc gctacgcggg ggactcagac 180
ctccagctcg agcgcgtaa cgtctactac aacgaggcca gcggcgggcg ctctagagga 240

<210> 4409
<211> 334
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D12

<400> 4409

tacaacatcc tatagtgagt cgtattagaa gagctggtcc agagcgcccg cccaaccatg 60
gcggcgggcg cgcccgtgcg cgcctgggtg gtggcgctgg cgctggtgct ggcgtgcgcg 120
ctgctctagc cggggccgtc cgacgccgcg gggcagtcg cccgcagtc gccggcgacg 180
gcggtgtcgt cggggcgccg caagcccaag tgcgtggccg gcgccaggaa cgaccaggcg 240
tgccgcgtcg gcgccgtgca cgacgcggac agccaggagg acgagggctc cagcgtcagc 300
atcgaagcgc ccgccgccg actcgacgac gtcg 334

<210> 4410
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D3

<400> 4410

cgggtcgagc cacgcgtccg cttgtgccga ttctgctgat ccctcgccga caacggccgg 60
 cgaatcgaca ccatggccgc tgcgcgccgg ggcccgtggc gacagcacca acggcgctcgt 120
 ccgtccccgc ccccgcgacc gcggcgtcgg cggccggagc atggcggggc gcgtgggcgt 180
 cctcgccctt tgtgtcgcag ggatctggtc cgcctacatc taccaaggcg tcctccagga 240
 gactctatcg acgaagcggg tggggccgga tgcgcggcgg ttcgagcacc tcgcgttcct 300
 caacttcgcg cagaacgtca tccgcttcg 329

<210> 4411
 <211> 253
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D4

<400> 4411

gcgtccatgc gcaccggacc cggagcagga ttccagcacc ggttacgacg gcagggatgt 60
 cgtgctccag aacctgggtc agatctgcgt gttcagggtc gccaatggga ctcgcaggcc 120
 gtggatgtgg tgggactacg tgcacgactt cgctgtgagg tgcccgatga aggagaagaa 180
 gtacacgcgt gagtgtgcga acggtgttat caattcactt ggactggaca ttgagaaaat 240
 caacaagtgt gtt 253

<210> 4412
 <211> 314
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D5

<400> 4412

cccgggtcga cccacgcgtc cacgaatctg ccattccttc caacacgaag atggcgttca 60
 tcagcaatgt cgcagtgaag gcggcggccg tggccgcgct gctgctggtc gcagcgggtgt 120
 cgcctgccgc gcgcgcggcg gcggtggcgg tggcgggagg ggcgccgtcg gtgccggcgg 180
 gtccgctgga catcgcgag ctgggcgcca agggcgacgg caagtcggac agcaccgccga 240
 tgatcctcaa ggcgtggaag aacgcgtgcg aggcgacggg ggtacagaag atcgatcatcc 300
 cgccgggcaa ctac 314

<210> 4413
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-D6

 <400> 4413

 gggtcgaccc acgcgtccag gatcactatc tcgctcgcga gggcactctc tctctcgctc 60
 actcacaccg tgctgttctt cgtttgctgt cgcctcgaag agcctcctcc gttccctctc 120
 cctcgaccga tcggccgggtc tcacggggca ttctcgggcg ctggtcgata tctccgcgct 180
 cattctgtca acggattggg cggttgccga ttccgtgcgg ccggataact cggatttatt 240
 cagtttttcg ggttcgctac atgcgtgtgc gatgccgggc agctccctca cggcgtccca 300
 cgacgccacc ggcgacattg ggcgcgcgct cgagctcgat ctcgatgatt tcaccgccag 360
 cggcggcacc gactgcatcg tggcgctcgc ct 392

<210> 4414
 <211> 325
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-026-Q1-E1-D7

 <400> 4414

 ccacgcgtcc agtgagatat tggaatatca tccacaactg ctcaaagact atatcaatgg 60
 cacggagagg acaacctttc tgtacccaag tgctgtcgac caatttagga agcaatttgc 120
 tcattctgaa gaaaatagtg gaaacggacc tgtgattcca atggaaagaa aacatacttc 180
 tcttcttagg tctactattg ttactcatc tccaattcct gtcaaggaaac aaccccgat 240
 cggcccatgt anggaaaggc cttcatctga tgagtcctaa aggaatcctc gggagacagg 300
 acaatattcc gggaatctcc ccaaa 325

<210> 4415
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D8

<400> 4415

atacaacact ctagagttag tctgtattaat catccacaac tgctcaaaga ctatatcaat 60
ggcacggaga ggacaacctt tctgtaccca agtgctgtcg accaatttag gaaccaattt 120
gctcatcttg aagaaaatag tggcaacgga cctgtgattc caatggaaag aaagcatact 180
tctcatccta ggtctactat tgttcaactca tcaccaattc ctgtcaagga acaaccccg 240
atcggaccat gtatggaaat gccttcatct gatgagtcct acaggaatcc tcgggagaca 300
gaacaatatt cctggaatct ccgccagaac gtcacaggct ccagaaagag tgccaacagt 360
cagaccagta aagggttttt ggccaata 388

<210> 4416

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-E11

<400> 4416

cccgggtcga cccacgcgtc cacaagcatt cagacacaca agcgtcaaac ttgtcaagca 60
gctagcaaacc aacccaagaa agacaccata cccatggctc gcgctagcgt cgtcttcgtc 120
gttgctgctc tctcttcgt cgccatggtt gtggcaccga tggccgaggc aaagtccgct 180
gatgccccct ccgccgatgc ccccgcccc gctgctgacg cacctgccga tggacctagc 240
ggaccggcag gtgcacctgg tccccagggc gtcgaggac tatcgggcaa tgaggacgac 300
gacgatgact ccaccaacta aggccaagca cgtcgggtccg attgcatttg gaacaagata 360
tgaaagaaaa gtgagagcaa tgttgtttaa aacaaaaat ccataataat g 411

<210> 4417

<211> 372

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-026-Q1-E1-E12

<400> 4417

tcccgggccg acccacgcgt ccaccacgc gtccgccagg tccaagtgat cttgccaagt 60

tacgagcagc aagcagagat cagatcatcc atcggcaatg tcgaacatcg ggcagtcctt 120
ccaggccggc aaggcggang gcccagggcg agtacaggcg gagcacgccg cgcagtgcgt 180
caaagacacc gccggagccg cggccgacag cgcgcacctg cagcagcacc gcgccaccgg 240
caccgttgac caggtggcgc aaacgggcca gggcgtggcg gcaggcgtca aggacacggt 300
ggcggggcccg gcggttggcg tcaccaacac ggtggcgggc ttggcgggcg gcgtcacgaa 360
cacggtgacc cg 372

<210> 4418
<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-E5

<400> 4418
ccacgcgtcc gccacgcgt cgtccacgt ggtcaacaac gactacacgc actggctcat 60
gtacgccatc ggcggcagca agggccccac catcatcagc cagggaacc gctacatcgc 120
gccgccaac cttgccgga agcaggtcac caagcagcat gacacgccg agtccgtgtg 180
gaagaactgg gtgtggcact ccgagaacga cctcttcacg gagggcgctt acttcaccgt 240
caccggcggc cagatcaaca gacagttcaa caagaaggac ctcatcaagc cc 292

<210> 4419
<211> 302
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-E6

<400> 4419
ccgggtcgac ccacgcgtcc ggatggcggc gccacgacct ctctatttgc cgctgctggt 60
cgccatgcta gcggtggtcg ccgatgtcgc caacgccggc cagccaagc ccctgacgcc 120
tggcggggcg gtggtacacg acaaccacgg caagttcacg gccgggccgt ggaaacctgc 180
ccacgcgacc ttctacggcg ggcgggacgg gtccggcacc acggcggggc cgtgcgggta 240
caaggacacg cgcgagcagg ggtacggcgt gcagacggtg gctgtgagca cggtgttgtt 300
tg 302

<210> 4420
 <211> 238
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-E8

 <400> 4420

 agtgagtcgt attaaaaccg cctagtcacg cgagtgatcg gcgattgagg tatggaacga 60
 tcatcatcga cgcgggcaac tagactgacg gagcggactg ctgccgggcg ggtctgaacg 120
 tcctccatca gcgtttctca gcaccgcagt ctgctcggtg gcaggcacgg caatgcgtat 180
 gaatgggaac cggctaggaa tccagaacgt gcatacgctg accatcagag gcgacggc 238

<210> 4421
 <211> 389
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-E9

 <400> 4421

 ccacgcgtcc accacgcgtc cgcggaacgc tgggcggacg cgtgggattt cgaataaacac 60
 agttgagcgc gacgatggga tccctcgcta ataacatcat ggtcgtgggt gtcgtccttg 120
 cagcgtcgt cgccggcggg tcatgcgggc cccgaaggt gccgcccggg cccaacatca 180
 ccaccaacta caacggcaag tgggtcaccg ccagggccac ctggtacggt cagcccaacg 240
 gtgccggcgc tcttgacaac ggcggtgcgt gcgggatcaa gaacgtgaac ctgccaccct 300
 acagcggcat gacggcgtgc ggcaacgtcc ccatcttcaa ggacggcaag ggctgcggct 360
 catgctacga ggtgagatgc aagggaataa 389

<210> 4422
 <211> 339
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F10

 <400> 4422

 tctatagtga ctcgatttac tggttactcc gcgcgccttc tcgttctctc tcggacgtcc 60

atcgtgttct tcagcaccgg ctagctaatt cctccctcc cagccatgat gacgccggac 120
atcacggggc acgggtatcc gctgccaag tttggggagt gggacgtgaa gaatccggtc 180
acctccgacg gcttcaccgt catattccag aaggcccgcg actacaagaa gaccaccacc 240
ggccctgggg ctgggaacgc ggcgcgaagc attccgcagg ctttcacgaa cggtggctgc 300
gacggcggct acatgcccga cttcggcgac ggcaaccag 339

<210> 4423
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-F12

<400> 4423

acaacaccct agagtgagtc gtaatatataa cagatcgatc gattacagca atggcggcca 60
aggtgttctt cctcctccga ctcagcatgg tcgccgtcgt cctggctgcc atgccacag 120
tagtgctcgc ggaggaagcc gatccgcggg cactgccggc acagtggacc accgcgaaga 180
agtacaaggc cacgatggac gccaaagacgc ggcaggcttt cgacggcgtg gtggccgccg 240
ctacggcaga gaagcggctc caggcgggtgg aggccgtgct gcagcagcag ctgaacatgg 300
acgtgtccct gtccaaggcg acgtcttccg gggacgag 338

<210> 4424
<211> 294
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-F5

<400> 4424

ccacgcgtcc aattttctgg agcgttgctt tcccacgggtg gctggagcta ctgattcaga 60
agtgcaaagg cctgcgacgg tttgagttgc agtgtggtct gtcattgctc aggagctgcc 120
tcgacgggtg caagaactgg catctcgtgc agcagatccc cgagggtgcg atcataagct 180
gcgatggcaa gagatacttt cggataaaca agagccgccg catctacgaa actaatgcac 240
agtcagaaga atgaagccat ttctgaaaac cttggcacga cactggtttg tttt 294

<210> 4425
 <211> 344
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F6

 <400> 4425

 ttacaacacc ctatagttagc tcgtatttagc cttcccacgg tggctggagc tactgattca 60
 gaagtgcaaa ggcctgcgac ggtttgagtt gcagtgtggt ctgtcattgc tcacgagctg 120
 cctcgacggt ggcaataact ggcattctcgt gcagcagata ccggagggtgc gcatcataag 180
 ctgagagggc aagagatact ttcagtataa cagcagccga cgcattctacg aaactaatgc 240
 acagtcagaa gaatgaagcc atttctgaaa accttggcac gacactgggt tgttttgggt 300
 catccacacg tttcagttgt cgtgtgccct accttgggcc cgga 344

<210> 4426
 <211> 281
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F8

 <400> 4426

 ttactacacc ctatagttagc tcgtatttagc ccgatgagca tggactgcct agtaactcga 60
 tgatgtgtgg agtaccatgg ctgactcgtc agagtatgtg agagctcata actaggccag 120
 gcataaaatg tggactcatt ttcattgaatg attttcattc gcgatttgag cgtatatcgc 180
 attttaattt gttttgaact gtcattgtac gtcatttatg acgttcaacc gtttagtcat 240
 cagctatata attcatgtat cgagatatag gggatttcgg g 281

<210> 4427
 <211> 375
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F9

 <400> 4427

 ccacgcgtcc acggacgcgt ggggccgtga cccgggccc ggcgctgtgg atcaccttcg 60
 cgcgcgacat ggtgatcgag ctctgccagg agctcatcgt gagcagcgac aagaccatcg 120

acgggcgcg agcgcaggtg cacatcgtgg gcgcgcagat cacgctgcag aacgtgcgca 180
acgtgatcct ccacaacctg cacgtccacg acgccgcggc gcacggcggc ggcgcgatcc 240
gggactcgca gcaccactgg ggcgtgcgcg gggagagcga cggcgacggc gtctccgtga 300
tggggtccag cgatatctgg atcgaccacc tgtccatgag cagctgcgcg gacgggctgg 360
tggacgcggt ggacg 375

<210> 4428
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G11

<400> 4428
tcccgggtcg acacacgcct ctacccacac ttctggcaac cctacagcgg catgacggcg 60
tgcggaacg tccccatctt caaggacggc aagggtgcg gctcatgcta cgaggtgaga 120
tgcaaggaaa aacctgagtg ctcgggcaat ccagtcacgg tgtacatcac tgacatgaac 180
tacgagccta tcgtcccta ccacttcgac ttgagcggca aggccttcgg ctccctggca 240
aagcccgggc tcaacgacaa gattcgccac tgcggcatca tggacgtcga gttcagaagg 300
gtgcgatgca agtaccgccg cgggcagaag atcgtgttcc acatcgagaa gggctgcaac 360
cccaactacc tggccgtgct ggtg 384

<210> 4429
<211> 193
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G12

<400> 4429
gatccacgcg tccaaaataa atcataataa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aagaaaaaaaa aaaaaaaaaa gggagaaaat aaaaaaaaaa ggcggcctct 120
ctatagggtc aacgctaacg tactcctaca ggggagtta aacccttct agagtacccc 180
ctgaattcaa tta 193

<210> 4430
 <211> 377
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-026-Q1-E1-G2

<400> 4430

cgggtcgacg cacgcgtcca cccacacgtc cggcttaatt gcgccactgc tcgttatcct 60
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 ggcagacgta cgtcgatgag cacctcatgt gcgagatcga nggccaccac ctgagctctg 180
 ccgccatagt cggccacgac ggcgcgcttt gggcccagag caccgcattc ccacagttca 240
 agccagagga gatgaccaac atcattaagg acttcgacga gcctgggttt ctggccccga 300
 tcggcctctt ccttggtccc accaagtaca tggcatcca aggcgaacct ggcgctgtca 360
 tccccgggaa aaaagga 377

<210> 4431
 <211> 330
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G5

<400> 4431

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 cgccaagccc ctgacgcctg gcgggcgctt ggtacaccac aaccacggca agttcacggc 120
 cgggcccgtg aaacccgccc acgcgacctt ctacggcggg cgggacgggt ccggcaccac 180
 ggcgggcgcg tgcgggtaca aggacacgcg cgcgcagggg tatggcgtgc agacggtggc 240
 cgtgagcact tcgacctcag catgcccgcg ttcctccaga tcgcgcagga gaaggccggc 300
 atcgtgcca tctcctaccg caaggtggcg 330

<210> 4432
 <211> 331
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G7

<400> 4432

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agcatggcga tggcgtaccg tgtcctggag gtcaccctgg tgcggcaaa tgacctcaag 120
aaagtgtcgc tcttctcccg gactcgcac tacgccgtgg cttccatctc cggattcgac 180
ctccgcatcc cttccacag caccgaagca gaccacagca acggctgcaa cccctgctgg 240
aacgccgtgg tacacttccc catcccggt gccgctgaca cccgcggcct cgcactccac 300
gtgaggctcc gcgcccagcg tctatacctg g 331

<210> 4433

<211> 222

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G8

<400> 4433

ccgggtcgac ccacgcgtcc actgcttcat actctcgtag agagatcccc gcggcccaat 60
aaaaacccga ctgcgtagct gcactacaca ctgcagatg gccggcctca ggatgaagtt 120
cgtcgccgtc gccgccatgg ccgccgcgt cgtggcgctc gccgcagccg ccgaggcccc 180
cgccccggcc cccgcctccg acgccgcggc cgctctagag ga 222

<210> 4434

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G9

<400> 4434

ccacgcgtcc acttctcctt cgtcaccatc acatccagcc agccaacaaa aatgtcgcgc 60
gtcacagctg cgggtgtctt ctacatctc gccgttgctg ccctcagcgc ggccgaggcc 120
ccggcagagt caccgaagga aggcagtgt gccaaaggcac ctgagtctgc caagagaact 180
gctgcccccg ctgaagcacc cgaagccgca tccacccccg tcgccgccgc tgccccatcg 240
ccgtcgtcta ggaagtctgg tccagctacc gcgccagcca gcgcctctac accccttct 300
tccacggacc aagaattgag ccttccccg ccagcatcca ccgacgcggc gtccccctgcg 360

gctgagggac cggctgctga tgact

385

<210> 4435

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H10

<400> 4435

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ccacatctat taggtgcagc catgggtgcc tgtgcaacga agcctaagac gcttgagggg 120

aaagccccag ctgaggccac catctccaca cccaaggttg cacctgagac cactaccatc 180

cacattgagg ttgcggcaaa acatgcagta gttgagaagg tggaggagga caaggaggag 240

gcactaacag tggcggcgaa acaagagcca gcagccacca ttgagcctca gcagattgct 300

agtgaggtga ccacttcgga agtggcggtc gtcgttgctg agcctgagaa caaagagga 359

<210> 4436

<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H5

<400> 4436

gtcgacacac gcgtctagac tcattagcgc gccggactcg cgcgtcatct tcgccgacac 60

ctacctctcc aagaccatcc agccggcccg ctggacaacc ataggctaca gcggcatcac 120

cgacaaggtg acgctcgcg agttcaactg cactgggccg ggcgctgacg tgacgaaccg 180

cgtgccatgg tcgcggaggt tctctctcga cgacgcagcc aagtacctca ccatcgactt 240

catcaactgc aaggactggc tgccggcgta ctactactga tccgacgatc gactgctgg 299

<210> 4437

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H7

<400> 4437

gggtcgaccc acgcgtccac cgatccatct tgggcgggcg ccgcgcgtcg agggccagcc 60
 aaagcttgcc atggcgggcg tccgggtccga cagggtccac caccaccacc gccgctccga 120
 ggcgtcgtgt ccggcaacct ccgcgggccgt ggcgggcgcg agggccgatg acgccctgcy 180
 ccagcgcccc cggggggtcg tgcaggtccg ggagcgggac cagggccccg tgtcgacggg 240
 gcaccagcac ctgcaccacc atcaccacca gctgcggcgg tcggcgggcg tccccccccg 300
 ccgcccgggg ccggggcgcc gccctcctca gcgctgcgaa agcgacctc 349

<210> 4438
 <211> 386
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H9

<400> 4438

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 gcccggggac agccccaaca cggatggcat ccacatgggc gactcatccg ggatcaccat 120
 caccaacacc gtcattggcg tcggcgacga ctgcatctcc atcggccccg ggacctccaa 180
 ggtgaacatc accgacgtga cctgcggccc tggccacggc atcagcatcg gaagcctagg 240
 gcggtacaag gacgagaagg acgtcacgga catcaacgtc aaggattgca ctcttaagaa 300
 gacgatgttc ggcgtccgca tcaaggcgta cgaggacgcc gcctccgtgc tcaccgtctc 360
 caagatccac tacgagaata tcaaga 386

<210> 4439
 <211> 340
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A3

<400> 4439

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 gctaataaca tcatgggtcg ggggtgcgtc cttgcagcgc tcgtcgccgg cgggtcatgc 120
 gggcgggccga aggtgccgcc cggtcaccaac atcaccacca actacaacgg caagtggctc 180
 accgccaggg ccacctggta cggtcagccc aacgggtgcc ggcgctcctg acaacggcgg 240

tgcggtgcggg atcaagaacg tggacctgcg accctacagc ggaatgacgg cgtgcgggaa 300
cgccccatc ttcaaggagg gcaagggctg cggctcatgc 340

<210> 4440
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A7

<400> 4440

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tcgctaataa catcatggtc gtgggtgtcg tccttgacgc gtcgtcgcc ggcggtcat 120
gcgggcccc gaaggtgccg ccggtccca acatcaccac caactacaac ggcaagtggc 180
tcaccgccag ggccacctgg tacggtcagc ccaacggtgc cggcgctcct gacaacggcg 240
gtgcgtgcgg gatcaagaac gtgaacctgc caccctacag cggcatgacg gcggtcggca 300
acgtcccat cttcaaggac ggcaagggct gcggctcatg ctacgaggtg agatgcaagg 360
aaaaacctga gtgctccggc aatccagtca cgggtgtacat cactgacatg aactacgagc 420
ctatcgctcc c 431

<210> 4441
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A8

<400> 4441

gggccgaccc acgcgtccag cgagctctc gcccgctcg cccgcggccg gctcaaggag 60
gacgccgca gaaggtactt ccaccagctc gtcggcgccg tcgacttctg ccacagccgc 120
ggcgtctacc accgcgacct caagccccgag aacctctcg tcgacgagca cggcaacctc 180
aaggtctccg acttcggcct cagcgcgctc agggagtgcc agaagcagga cggcctgctg 240
cacaccacct gcggcacccc cgcgtacgtc gcgccggaga tcatcaaaa gaagggctac 300
gacggggcca aggccgacat ctggtcctgc ggcgtcatcc tcttcgtgct cctcgccggc 360
tacctcccgt tccacgacgc caacctggtg gagatgtacc gcaagatcag cagagcccac 420

gtcaagtacc cgc

433

<210> 4442

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A9

<400> 4442

cacgggtcga cccacgcgtc cacatctgtt caaagcagat gcaccacacc ggcaacgagc 60

tcttgcagcg gacgcaataa cctgccggaa attcgccgag cgggcttaca agtacagacc 120

actcaaagtt gttgagtttg atcgcccta cccacagtgc atagcatact tggatctcaa 180

gcgcgacgag tgctctcgac tctttcctgc agggcggata tactcgcaag cgttccacct 240

tgcagggcag ggtttcttcc tctcggctca ctgtaacatg gagcagcaaa gcgcgttcta 300

ctgcttcggg ctcttcctgg ggatgcaaga gaagggtcc acgagtgtga cagtggacta 360

cgagtctgct gcaaggacga g 381

<210> 4443

<211> 388

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-027-Q1-E1-B1

<400> 4443

gcgcgggtccg atacaacacc ctagagttag tctgtttaca tgcagatctt tgtgaaaacc 60

cttactggca agaccatcac tcttgaggtg gagtcttcag ataccattga caatgtcaag 120

gccaaagatcc aggacaagga gggcatcccg ccggaccagc agcgtcttat ctttgccggc 180

aagcagctgg aggatggacg cacccttgcg gattacaaca ttcagaagga gagcaccctc 240

cacctggtgc tgcgcctcag gggaggaatg cagatcttcg tgaagacatt gacaggcaag 300

accatcacct tggaggttga gagctccgac accattgata atgtgaaggc caaaatccag 360

gacaaggang gtatcccccc ggaccagc 388

<210> 4444

<211> 381

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-B10
 <400> 4444
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 ggtggtctcg accccattcc gcttggttac cacgaacatc tatgggatgg cggtgatggc 120
 cgtcggggtg tactgcgcga gcaggtatgc agctgatatt ggcaaccgcc gtgatgtggt 180
 gaaaatggaa gtcgaggacc tgacggcccg actggccagc ggcaggatat gtgctgtgga 240
 gaacatcgcc cagctggtgg ctccggaggc agaaggcccg gccgatgcca cggccacggc 300
 cacgctggct gcttaacggg ccattgtgcc attattgctg cgacagagat gtgcgtcagc 360
 caacatgtgt gctgttgttt t 381

<210> 4445
 <211> 323
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-B11
 <400> 4445
 aacaccctaa agtgagtcgt attacacgcc tcacacacgc tctcgcgctc accggcgcct 60
 cgcacctctc ccacgctggc cgcacccgca atggggtgcg ccgcgtttgc cgccaacggg 120
 gccggggccc gggcggcggg ggtggcccg ccccggtgcg cggtaaacca agggttcact 180
 cggctctgcc cgcgccgcc cgcgcgcagg gagcggcgga gtcgtcgtcc cggggcaaga 240
 ggcaaggcg caaggtggcg ccggaacca aggagccggc ggaggaaggg accgccgcgc 300
 tgccgccgat gcccggtcg ccc 323

<210> 4446
 <211> 390
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-B2
 <400> 4446
 acaacaccct atagtgagtc gtattacagc gccgagcgct tccgctgccc cgaggctctc 60

ttccagccat ccttcacg gatggaagct gccggcatcc acgagaccac ctacaactcc 120
atcatgaagt gcgacgtgga tattaggaag gacctgtacg gcaacatcgt cctctccggt 180
ggcaccacca tgttccttgg gatcgtgac aggatgagca aggagatcac tgccttggct 240
cccagcagca tgaagatcaa ggtggctgct cctccagaga ggaagtacag tgtctggatc 300
ggaggatcca tcttggcatc cctcagcacc ttccagcaga tgtggatcgc caaggccgag 360
tacgacgagt ccggcccatc catcgtccac 390

<210> 4447
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-B4

<400> 4447
cgggccgacc cagcgtcaa cacgaatctg ccacctctc caacacgaag atggcgttca 60
tcagcaatgt cgcagtgaag gcgccggccg tggccgcgt gctgctggc gcagcgggtg 120
cgctgccgc gcgcgcggcg gcggtggcg tggcgggagg ggcgccgtcg gtgccggcg 180
gtccgctgga catcgcgcag ctgggcgcca agggcgacgg caagtcggac agcacccca 240
tgatcctcaa ggcgtggaag aacgcgtgcg aggcgacggg ggtacagaag atcgtcatcc 300
cgccgggcaa ctacctgacg ggcgggctgg agctgaaggg cccctgcaag tctccatca 360
tcatccgtct cgacggcaac ctgctcggca ccggcgacct c 401

<210> 4448
<211> 332
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-B6

<400> 4448
atagtgagtc gtattaaaag atgctattga ctacgtcgag tggcactaca gggagcccag 60
cgatgacaag ttccggcatc gcaagtcgtg gtcacctcc agtcgcggcg gcagctccag 120
ctgcgacgac ggctgcatcg acctgcccac caacggcgac aacgacgacg tcatcaactt 180
catcctcgac ttcgacaaac tgcaccgct caggctggac cgcacaccc acgcatgcgg 240

ctgcatgtgc gcaagcatcg tcatgcgaca ctccatcggc ggaacgctct cctacagcgc 300
agtcgggttc tgcggagggt tgcgagacgc at 332

<210> 4449
<211> 392
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-027-Q1-E1-B8

<400> 4449

cgggtcgacc cacgcgtcca agccacatca catacaggaa agcaagcaag aatcatcggg 60
ataatggccc gtgcatgcgt gttcctcgtc gtgctcctcc tggccgccat cgcggtggca 120
ccgttcgcgg gcgccgcacg cgtggacgtt gtggagggtta ggtccatggc atccgccgat 180
gcaccggagg cggcgggccga tgctcccgct cctagccccg actccgcctc atcnccagac 240
tcgtcatcgg aggcgccttc tagcagcagt tcctccgact agacgcanaa acctcttcat 300
tctctggaat aactaacagt atatacgttg caccctgatg atatagaaac atgtacgtgc 360
atcagtgtat ggaatgcgag tgggaaacac at 392

<210> 4450
<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-B9

<400> 4450

acaccctata gtgagtcgta ttaaaagggc cgcctccgca agcagagggt cagctacggt 60
tcacgcaaga tggcgtgaca ttatcgttct accctgggtt actgggtggc agcgggggcg 120
tgggtcatct aggtattcgc gttgcgggac gtacgcctca tgagcgtagc catcctgcag 180
ggggggagat ttcaggtttc acctggaacg cgcacgcacc gtctggtagg tgaagcagca 240
gatcaggaag gaacagcccc cgtcggcgcg ccccgacgta gcaagagggc gtgctcgagg 300
gtgaggacct cgacgacagc cacctcatcc agtatatgtg cacggcttag ggcggcggtga 360
gagacagtga cgggtg 376

<210> 4451
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-C1

 <400> 4451

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 tggagtgcaa gcacttcggc accggcaagc tcgatcgctc catccacggg gtgaccacc 120
 ggaacggcac atacacgatc caactcatgg acagccacga ggaggacatc ggctaagtgg 180
 tcttggtgga gagcccgcac aaggactgca gaccaggtac atgccgacag ggaccgcgcc 240
 ggcacatgac tcacacgaa cgtcggcatt aacgagcttc tgcgctcctg gaaaagtctc 300
 gggtaactca aggacttgcc actgatcatc tacgcatccc tgctcaaaca gttggactca 360
 g 361

<210> 4452
 <211> 296
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-C2

 <400> 4452

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 tcctaagcgg atgcatcgctc cacacgagag ccgcaggatga tgaccacagt tgcgacgagt 120
 agttgatcaa tagcctcatg tagggctaga cctgacttga cgggttcgtg accaacgtca 180
 ccgaggtaga tccccgacac gaatgtgacg caggtgtgca tgcacgtcag ctgaggcaac 240
 ctcgagcgcg tcactctacgg tgtcatcgat gccagtggta tctacacgat gtaact 296

<210> 4453
 <211> 331
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-C3

 <400> 4453

gcaaaagtaa ctccattgca tttgtgtaca gatgtacaaa tttgcttggt tgagctgcta 60
 tacacattac attacacact tgctgcttca cttcactata ggactatgtc tcgcctcttc 120
 ttgatgttca ttggctcggc accagccgtc cttttcctca tcatcgccac aaactctgaa 180
 taatctatcc ttccatcatt gtcagagtcg gcatcggaga tgatgtcttt gattttatcg 240
 gcgtcataca acccttgctc cttcaaggcg tgctcaagct cttctttagt aatgtacccg 300
 ctgttgctct tgtegaaata ctggaatgct g 331

<210> 4454
 <211> 417
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-027-Q1-E1-C6

<400> 4454
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 tcaactgtcg agacggcctc gcaactcgac tcgccactga tcaaccagaa ctacccgctt 120
 ctgaaccaga tgcaggtggt ccaccacctc ggcggcagtc agcagccgtc gttccaccag 180
 gacggcagcg cggcggtttt cggcgacatc gtctcctctc gcctgccgcc actgccaacc 240
 gccagaacgc aggcgagct acattcgaac caattcgaca cctccagcag cggcgggctg 300
 ctggatcagt cgatgctgat cggcgacgaa cacctgctgc ggccaaccc gagtatggtc 360
 aaggtctcct ccatgcncgc gctctctac cgtgaggcgg atgggtccag gatgctg 417

<210> 4455
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-C8

<400> 4455
 cgggccgacc cagcgtcca ctgatgtacc atcaaacacg gtgttgacag catcaaagaa 60
 gatgctggaa ctaaaaatga gttcagcagt ttagcaatc gaaagcaaac ctgggggaat 120
 tctgacatct agagatatcc tgatgcgtgt tatcgcccaa aatcttctc ctgagtccac 180
 tacagtcgag aaggtcatga ctcaagtgtc tgaatgtgcc tcggtagaca cccaattct 240

tgatgctctt cacacaatgc atgatggaaa atttttacat ttgcctgttc tggacagggg 300
 tggaaatggt gtgactgttg ttgatgttct tcacataacg catgctgcaa ttgctacggg 360
 tggaaacagc ggggcagctg gatctgagtc aacgtctgcc atg 403

<210> 4456
 <211> 336
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-D1
 <400> 4456

ttcgcgggcc gacccacgcg tccacaaatg tcattctagg acctaggaag gcgaaagtgc 60
 tcagctgatt cggcactacc accaccagac aaactgaagc caattccgtt cagcgtgaag 120
 tgaaacgtta gcaattatag gatagtcagt gtcttactgt ctttaaccta gttgtttctc 180
 tatttccgct tctttttcta gtttaccta tggtagagtg gttttctagt ttcccgggcc 240
 atctagatag gaaaaagcgc ttggagggaa gaatccatgg ccgacatcta tttaaccttt 300
 tcaccttggt actaagataa tggagtattt tcgaga 336

<210> 4457
 <211> 389
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-D11
 <400> 4457

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 gcacacgcta tcattccggc caacatcgac ttccgcagag agccttggtc aaaggtgtcg 120
 gaaaatgcaa aagatcttgt gaggaagatg cttgatccaa gccctactg tcggttgact 180
 gccagcagg ttctagaaca tccctggata cagaatgcca gtgcagctcc caacatccca 240
 cttggagaag cagtgaggtc caggctgaag caattcactg ttatgaacaa gttcaagaag 300
 aaggccctgc ttgtggtggc agagtaccta ccagccgaag agctggaagc aatcagggag 360
 ttgtttcagt tgctggacac gaacaagga 389

<210> 4458
 <211> 334
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-D2

 <400> 4458

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 acggccaccg gaaagaaaat gtcgcgcgct acatctgcgg tcctcttcta catcctcgcc 120
 gtcgactgat ctcagcgcgg cctacgtacc ggaagagtca ctatggcagg tagtcgtgca 180
 aaggcaccgg tcgagtgcaa taatgcacga agtcctgcag actcttggca cagcacacga 240
 ctctgctgca attaaaactg cacgcgctaa cggacatcat gccggatcta gaccagccgt 300
 tgcagctgcc ccatcgtcgt cttcgtctag gaag 334

<210> 4459
 <211> 326
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-D3

 <400> 4459

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 gaaatgcttc taattctttg ggcccagaaa atgcaagccg tgggggagcc gttaccgccg 120
 ccagcctctc ctgcccccggt tttcgttgcc gtttcttcat tagcgcgaac aaagttttgt 180
 gccggtctat cggccgcgcg tttcttcacc tattcatcaa gactgcaata actgtcgcta 240
 cctatgcttc tcacctgtga ttttttggac acaatatgtt aagggtccatt caattctaatt 300
 gagacgcctg atgaggctac tagcat 326

<210> 4460
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-D4

 <400> 4460

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ttttcgtggt gccgcccggc cgtgcctgtc ggccagtggc tggctggcgc tcggccggtc 120
 gtcctcgcct gcctctgcag cgccagacac cgcaggacgg ccgcccctgt tcccggaacc 180
 gatccgcagt gcgggcacgg ggcagatgcc agtcggcaag agaaggagcg attgccgccg 240
 cggcgtggtg tgtggcgcca ccagcgtgtt tgccttttgc ccgatcgggc cggccgagcg 300
 cgggagtcga atcgtgtcgc gatctagccc cccccgccg cgcgtggccc gctgcgctcg 360
 ccgcgcgaca tggcccgggc ccccggccga cggacgggcc cgcgcgcctt tgaatgattg 420
 aatccggccc gccaaagccca 440

<210> 4461
 <211> 427
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-D5
 <400> 4461

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 atccgccgcc gacgtaccac caccaccgca ggagcgagat ggagatgaag aggatcctct 180
 tcgccgtcct cgtcgtcatc gccgcctcgg ccaccgcagt gctggcctcc accgaggccg 240
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 ctggcgctgc cgctggcgcc gccgccgcgg ggcctccgc cagcagcggc gcgcccggcc 360
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<210> 4462
 <211> 442
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-D4
 <400> 4462

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gcgacgacct tcgccgtcat cttatccgtc ctcttctgtg ccgcggctgg caccgccgtc 180
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cacttcggca ccggcaagct cgagcgctcc atcgacgggg tgaccgacgg gaacggcacg 360
tacacgatcg agctcaagga cagccacgag gaggacatct gcgaggtggt cttggtggag 420
agcccgcgca aggacntgcg ac 442

<210> 4463
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D6

<400> 4463

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ccggagaagg gaggggaagg agcgcgagat ggacaaggcc aataagctca gcaccggagc 180
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cgcctccgcc gccggctccg cctagaccgg cccgcgttcg tggatctctc ttctttcttc 360
cacgtttttt tggagtcgat ggctgccgga gcaccgggat cttgccgggt 410

<210> 4464
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D7

<400> 4464

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tcgctggtgt cgccgctgct gtcgctacca tgatcttcta ctgagttcac cagggaccgt 240
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 aaataacgca agtgttgctt ttgcttgctc acttcgtgtg ctcttgtaac tttatgggggt 360
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<210> 4465

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D8

<400> 4465

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 acctccctct ctctggcccc gtgcagctcg cggcgtccac cggcttctcc tgggccaaga 360
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 ggcc 424

<210> 4466

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D9

<400> 4466

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 gatcacgatg atgggcagcg accggaacgg cagcagcagg aggcggcggg cgaaggagtc 180
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gccgtacaac ctggttttgg acaccgccac cgacctgacg tggatcaact gtcgtctgcg 360
 gcgccgcaag ggcaagcact atgggcgaca gtcgatgggg cagacgatgt cggtggggcgg 420
 ggaaggcgcg acggcggcga agaa 444

<210> 4467

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-E10

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 ggcgagggcg agatccagtc ggagtaccgc tacgacacca ccgaggctcg cccgccgggg 180
 aatggcgggcg gcgcgggggtg ggtggtgcgc ccaaagtccg tcacctaaa cttcaagacc 240
 agcaccaacg tcccaaagct ggggggtgat ctcgtcggat ggggaggcaa caacgggacg 300
 acgctcacgg ccgggggtgat cgccaacagg gaacggattt cgtgggagac taaagagaaa 360
 gttcacaagg ccaactacct cggctccctg a 391

<210> 4468

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-E11

<400> 4468

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 aggattgcac tcttaacaag acgatgttcg gcgtccgcac caaagcgtac gaggacgccg 240
 cctccgtgct caccgtctcc aagatccact acgagaatat caagatggat gactcagcca 300
 accccatctt catcgacatg aagtactgcc ccaacaagtt gtgtactgcc aacgggcgct 360
 ccaaggtcac cgtcaaggat gtcaccttca agaacatcac cggcacctcc tccaccccg 419

<210> 4469
 <211> 449
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-E3

 <400> 4469

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tactgaaac aactgctcca gattccatcc ggatgcttgt tcaaacagtt ctctcagata 180
agaaaccaga agaaattcaa tcagttgtag aatcactctt gagcaaagta attaataaac 240
ttgagcaccg tattgcaagc cagagtgaat tggtgaaaga nactatggat accaacggct 300
gtaactcagt tttgagaatg gagtctccct gtaacaacaa tgacagtaaa tcattatcca 360
gagtggaccc tccacaagtg gagttgactt cctgcagtga tctggagaag gtgaaagaaa 420
ctatggatac caatggctgt aactcagtt 449
  
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<210> 4470
 <211> 426
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-E4

 <400> 4470

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tgtcaaagct ggagcagatc gctgagacag agcgcttcat ggtgaagaaa caggacgggc 360
tggatgaagct gcaaggggtc aaacaaggga ggaaggggca gctcgcgatc gacgccgaga 420
tcttcg 426
  
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<210> 4471
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-E6

<400> 4471

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agagttttgg ccgcttcgca gagcagtggg atcagttcgt tgtgatgttc caccgctaca 360
aggagaagac agagaaggaa ctccaagcag cggcgcggct tcagacgaca acgcg 415

<210> 4472
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-E8

<400> 4472

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cgtccggggc tggtgggtcc ttcgacatca ccaagttggg cgcctccggc aatggcaaga 180
cagacagcac gaaggctgtg caggaggcat gggcatcggc gtgcggcggc actgggaagc 240
agacaatcct catacccaag ggcgacttcc ttgtcggaca actcaacttc acaggccctt 300
gcaagggcga cgtgaccatc caggtggatg gcaatctgct ggcgaccacg gacctaagcc 360
agtacaagga ccatggtaat tggatcgaga ttctacgcgt ggataacctg gtcacatca 417

<210> 4473
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-E9

<400> 4473

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tattcagata cactgcatcg gttttggaag aaagagcatg attaggggtg ttaaaagttt 120

atggagctgt cagaattaca tgatggcttt attgttcagg attctcttac catcaaagcc 180

caagttcaag tcattagaag atagaccgtc catttcgttg ccttgatggc cagtaccgaa 240

gggaactaat taggggtgat ctatcaaag tggaacaaat ttatcgggtg tttattgatg 300

aaaaagaagg acgttcagca ggctgattga ggataaactc gggcgggtcca gtttcagtgg 360

attctggcta gccatttttc atctttgatt ttatctgaac agagacttga actcgctatc 420

aactttcagt agacc 435

<210> 4474

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F10

<400> 4474

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ggaatgcgat tgataggcca caatgtccat gacactgacg tcgatatgct catggaagct 180

gccgacatcg acgggaacgg gaccctggac tgcaaggagt tcgtgacagt ctccattcac 240

ctgaagaaaa tccgtagcga ggatcacctg cccaagggtg tcagctactt cgacaagaac 300

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aaggcgatcg aggacataat cct 383

<210> 4475

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F11

<400> 4475

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gggtcgtgcg cggattccca gcggcgggcg gatttctactg ccatggcgac ggcaacgag 240
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gagggagtct agatatgctc ggccaggagc aacggccacc ccaagaatca cgcaatgttc 420
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<210> 4476

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F12

<400> 4476

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acatc 425

<210> 4477

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F2

<400> 4477

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 gctggacctg gtggggccct gcaagtcctc catcatcatc cgcctcgacg gcaacctgct 360
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<210> 4478
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-F3
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 cggagcgctt cggcggtcgc ggctagccag acgatggcca tgatcaatag gctgcangan 360
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 ggacacgacc ac 432

<210> 4479
 <211> 448
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-032-Q1-E1-F4
 <400> 4479

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ctcctcctct cctcctcgt ctccgccgcg gccagtgcgc ggaccgtggg cgacaccgtg 180
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gagaagggat ccgggatggg caccttcgtg caccgcaagt acagcgacaa ggaggacagc 360
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aacggcctcg tccgggagcc caccgacg 448

<210> 4480
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F6

<400> 4480

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tgagatgcgg gatctcttac aactatcgaa ctctcagctg caagacatca ttgaattcat 360
caagcggttc cccaatgttg atatgaccta tgagggtccgt gaggggtgatg atata 415

<210> 4481
<211> 68
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F7

<400> 4481

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atcagcgc 68

<210> 4482
<211> 450
<212> DNA

<400> 4484

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ccgccgcatt cacggatgga gatgaagaag atcgctgcgc ccgtcctcgt cgccgcctcg 180

gcggccaccg tggcgctcgc cgcggaggct ccggctccgg cccccaccag ccgtcctcctc 240

gccgtccgcg cccgcgtcgg cgcgcctc gggggcgccg tcgcctcatt ctgcgcctac 300

tacattcagt gagccgggcg gcgcgcccgg aggccagga agagactagg gggagagaga 360

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tcctcttttt 430

<210> 4485

<211> 415

<212> DNA

<213> Zea mays

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gctgacggct gtggcggagg cgttcgagga gctggcgcg gcgatggagg ccgatggcgg 360

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<210> 4486

<211> 244

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G11

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gccagctcaa gagcaacatc aggcgccgtc ggatcagctg tacgcctggg gtgtcgggaag 240
tcgt 244

<210> 4487
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G12

<400> 4487

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gtggtgcagg tctgtcatat tctgtggtgt agttcaagca taagccatta cagggaggct 240
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atttgtatt 429

<210> 4488
<211> 307
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G5

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ctgctaacgc cgtggtcccc gccgcagcac ctgtctacca ctgacggaac atctgtacta 240
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307

<210> 4489
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G6

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<211> 403
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G7

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cgccgatctc cgagaccacg gcagtccttg tgatggccgt cgtcgccacg ctcgccgccg 180
cggctaacgc cctggcccc gcccagcac ctgctaccag tgacggaaca agtgtagacc 240
agggaatcgc ctacgtctc atgctggtgg cgcttgctct cacctacctc atccacccat 300
tggacgcctc ctccgcctac aagcagctct tttaaaacca tccgctttgt aatttggcgc 360
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<211> 405
<212> DNA

<213> Zea mays
 <223> Clone ID: LIB148-032-Q1-E1-G8
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 gacgtgccgc cctccaacac ggccccacc aagatggcac ccaacgtcat cagcgccgag 120
 ttccgcacgt tcattgaggt ggtcttcgag aaccccgaga agagcatcga caccatccac 180
 atcgacggct acgccttctt cgccgtcggc atggggcccg gcaaattggac gccagcgtcg 240
 cggagtacgt acaacctcct ggacacggtg agccggcaca cgattcaggt gtaccaagg 300
 tcgtggacgg cggatgatgat gacgttcgac aacgcgggca tgtggagcgt ccgtccaac 360
 atctgggaga tgcagttact cggcgaacag ctgtacgtaa gcgtc 405

<210> 4492
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-032-Q1-E1-G9
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 ctccggcgaag tccggggagc tgagcgcgat ggggttgctg gcggcgaagg gcggcagcgg 120
 cgcgggcccg cagaagtgtc cgggcgcggt gggcgagtgc gacgtggacg aggcggagga 180
 tctcgggctg agcggcgggc gcctcggctc cgacgacgcg gtgcggcgga cgctggcgca 240
 gcggaagccg accaaccggt acatcagcta cgcggcgctg cgcgcgacc aggtgccgtg 300
 caacaagcgc ggccggtcct actacagcaa ctgcgaggcg cagaaggccg ccaacccta 360
 ccgccgcagc tgctccgcca tcacgcgctg cgcccgaac at 402

<210> 4493
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-H10
 <400> 4493

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 ggctgcagg tggggttcta tggaaagacg tgcccggcgg ccgaaggcgt catcagcgac 180
 atcgtcaaca acgaaatcgc tatggaccgg ggcattctcc ctggcctcat tcgcctcttc 240
 ttccacgact gttcatcac gggttgcgac gttccattc tcctggacga gtcgcccgcc 300
 ggcgacgtcc cagagaagga gtcgtccgcc aacggcttca ccctggtcgg gtcagaacc 360
 atcgacatcg ccaagtccac cgtanagggc atgtgccccg gcaaagtctc gtgcgcagac 420
 atcctgggct 430

<210> 4494
 <211> 405
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-H11

<400> 4494
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 tgtcctaaac tgaaagctct accagaaggc ctgaagcatg tagcgctgtg tgaacttcat 120
 gtggaggggtg cacatagcct aactgaaatc aaggacctgc caaaactatc tgacgagctc 180
 catctcaaag ataataaggt gctacagagg atctccaacc tgcccatgct tcgttccctc 240
 attatcgatg actgctcaaa gttgaagcat gtggcaggtc ttgatgcgct gcagcacctc 300
 agacttgtct ttctccgctc caccgagaca ttttatttcg aagagctagt aattttctgg 360
 agcgttgccct tcncacgggtg gctggagcta ctgattcaga agtgc 405

<210> 4495
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H12

<400> 4495
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tcacgctctc tctcttctc cgtcgctcg gcgtcgccat cgccggccat gggttgcggt 120
gggtccaagg aggccgtggc caccggcaac accagcgccg gcagcaaggt cctccggagg 180
aagtcctcct ccgtctccac cggcgcaagc cacacctcca ccacgtcgcc gtcgtcctcc 240
ggcgtcgtcg tcaaggacgt cgtgaaggat gcggcggcgg ccggcgaggt gatgacgcc 300
gccgacgccg agaagcctat ctctgtcgac cccaaggcag acgccatcgt ggtgatggac 360
gccaagaaag aggagggcaa caacaagggt gccgtggagg aggatctgct tcctgaatcc 420
acca 424

<210> 4496
<211> 423
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-032-Q1-E1-H4
<400> 4496

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ggtccagctg ccgcgccgac caccgccgcc tctacaccgt cttcttccac ggacgaggag 180
ttgagccctt cgccgtcggc atccaccgcc gaggtggcgt cccctgccgc tgatgggcct 240
gctgagggac cggcggctgc tgatgcctcc ggtgctgcta cccttggaag cggagctgcc 300
atcgttggtg tcgccgtgc tgcgtctacc atgatcttct actgagttca ccangggacg 360
tgtcgtcgag ggtgggcacg ttattggctg tgcgggtaat gtcgtctggt tcgggagggg 420
cca 423

<210> 4497
<211> 282
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-032-Q1-E1-H5
<400> 4497

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agagggagac atcctcgccg ccactctgaac ttgccgcggc cgtctctaca ggcgcaacat 120

gccagccgca tctagtgatg ctgatgaagt tgattctgtg aggcgtctcc gacgacacca 180
 cctgcatcat gtgcgccgac gccgacgga tcgtgacgtc ctccactata ggctcgctca 240
 ccgtcgctctt gtaatgcac atggacgtcg tgcacttggt ca 282

<210> 4498

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H6

<400> 4498

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 atgaagagcc gcagcatggc atcatcggcc gcgctcttgg tgctagccct cgcgctagt 120
 gcggccaccg cccacaggt agcggaggca aagaagaaga gagcggcgga gagcggcgag 180
 gcggcggagg cgaagaagat ccaggacgac ttctgctcga cgctgtgcga gggcaagaag 240
 gggacggacc tggtcgtgtg caaggagtcc tgcgcgtctt cccagcagtc caacctggtg 300
 ctgtacggca ggatccagtg caagggcaaa tgcaccgagc agaagggcat cacggcgccg 360
 gccatgaagg tctgcc 376

<210> 4499

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H7

<400> 4499

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 gttaactctg gaaggcgagt cctaccagaa gagctgcttc aagtgtctgc acggcggtg 180
 catcctgacc acctcctctt atgccgcgct caacggcgct ttgtactgca agatccactt 240
 cgcgcagctg ttcattggaga aggggagcta gaaccacatg aacaagaaga gcccgtctca 300
 ggaggttctg ccggacgtgg ctgaccagga gcaaccgccc gaaccagcgc caccgcaaga 360
 tgagaaagaa caggacaact aggatcggag cgaccaacaa ccacccatgc atatatatca 420

<210> 4500
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H8

<400> 4500

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 cacagaacct gacggcgacc gaggcggcgc ggcgggtgct ggagtcggcg gacctgctcg 180
 cgccgcggaa gctggacgcc aaggaggagc tggagaagct gaacgaggcc ccggcgtcga 240
 tgacgtcttt cgacttcatg ggctggcact tcgaacagga cgagctgatg aagcgcaggg 300
 aggacggcac gctggacgcc gacggcgagg ccatgtcctt caagaaggcg cccagcgtgg 360
 cgccaagaa gttctcttac gtcgacagcc tctcctccgg cggcatgagg agcccctctg 420
 cgcgccac 428

<210> 4501
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H9

<400> 4501

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 cacaggtttt ccattagcct ctctgtctgc ctcgtaaagt tactcaaccg gctgtacatg 120
 ttgcaaagat caccttgtag atgctctaca catgttgtca aataggaaac aaaaaaaaaat 180
 taatatatta tcataccatt agagtattag aattgtttcc tagaaagaaa atagtatatc 240
 agtatagttc attcgttcca acaactttta gtttcgggaa agaaacaatc aaattcattg 300
 tttataagtg caaataatag gagtttcctt agttcaacac attttctttg gaatgaatat 360
 acacctccca t 371

<210> 4502
 <211> 453

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-033-Q1-E1-A1
 <400> 4502
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 ttccaagtat gccactccct ggggtggcggc actggttctg gcatgggcac gctgctcatc 180
 tccaagatcc gggaggagta cccagaccgc atgatgctga ctttctccgt gttcccgtcg 240
 cccaaggtgt ccgacaccgt cgtggagccc tacaacgcga cgctgtccgt gcaccagctg 300
 gtggagaacg ccgacgagtg catggctcct gacaacgagg cgctctatga tatttgcttc 360
 cgcaccctca agctcaccaa ccttctattt ggcgacctga accatctgat ctcggcgaaac 420
 atgagcggcg tgacgtgctg cctgcggttc ccg 453

<210> 4503
 <211> 427
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-033-Q1-E1-A11
 <400> 4503
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 caccatgcat ggatgagaag taggcagcaa gcgggagaca gatctcggca aggctgaaaa 120
 attcaaagtg aggggaaagc aaatggccgt gcttaattat tcaaaggcta gtttcttgcc 180
 tgttcaggtt taccactcta gtttcgctga tgatgatggg atcacaaaag cttgcagctg 240
 tcctttgctt ccaactgaaaa ctcatatcaa gggcccggca ccagcctctg accctgataa 300
 agcggacatt gttgatgaag ccataacttt ctttcgagcc aatgttttct tcaaaaattt 360
 caatgtgaaa agctcagcag acaagttatt gatctatctg acgttttata tcaatattgc 420
 cttaaaa 427

<210> 4504
 <211> 420
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-033-Q1-E1-A2

<400> 4504

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gcttcgccgc gttcgtcaag cgcattgacng agccggggcg cgcgggaggc gtgccgggag 120
caagtggagc cggaggcccc aggcgtcgcg cagccaacc agcccctcgt gcacgaggcc 180
gccgtcgcg tcaccaactg accggaccgg ccggcggttc ccgtcgactg tggtcgatcg 240
ctagacgggg tggcacgctg cgacgactac ctgtatggcg agtccctata cttactcata 300
cataagctgc gccgccgtgt cgtcgggtcg tgcaccgcgc agtagtgtgc gtacagcgga 360
agctgcgact gcgagcgagg tanggtgttg ggggtgtgac tgggtaccag gagtggggta 420

<210> 4505
<211> 466
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A5

<400> 4505

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gaagagaccc cagccagtcg atcgttcaag aaaaatacca gcttaccaac aacagcagca 120
gcaagcccac ccgttcgacg acatggcccc cctcggcgcc ggcgccgtgt tggcgctcct 180
agtggcggtc gcggcggtgg ccgcgttcct cgcggtgccg gcctcggcga agtccgggga 240
gctgagcgcg atggggttgc tggcggcgaa gggcggcagc ggcgcgggcc cgcagaagtg 300
ctcgggcgcg gtgggcgagt gcgacgtgga cgaagcggag gagctcgggc tgagcggcgg 360
cggcctcggc tccgacgacg cgggtgcggcg gacgctggcg cagcgggaag ccgacaaacg 420
gtacatcagc tacgcggcgc tgcgcgcggg acaggtgccg tgcaac 466

<210> 4506
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A6

<400> 4506

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acgttcgcga cctcacatgg cggatttgag gacttgtgga gcatggggat tgctcgccga 180

cgctcgttag tctggggcat tccgccgtgc gccgtggta gggcaccagt gcgcataatc 240

caagcagtga ggacacgtgt catctgaaga tcctcctggt acctagaatc tcaagtccca 300

ggtcagaaca agttacggca ggatgatcct catggaaaat gctgcaataa tttcttaatt 360

ggcctaggtc ttctgtctcc agtcaacttt gggttgctgg accgttgtct ccttataagg 420

taatta 426

<210> 4507

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A7

<400> 4507

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gggatccgac tgccacaagg ccgctgtgat cggtgacacc attggtgacc ccctgaagga 120

cacctccggc ccgtccctca acatcctcat caagctcatg gccgtggagt ccctcgtgtt 180

tgcccccttc tttgccaccc aggggtggcct gctcttcaag tacctgtaaa agggacaaca 240

ccaagcacac agcagaagta tacgatctcc cgaccgaccg tggacaatat cgaataactc 300

ctgccaaatc gccagttcct tttgtgtact gtgcgctagc cgccgcctag ctgcactgct 360

gtatttttgt ttcaggattg ctgctgctgt tcgcattcaa tctttgggcc tcccggagcc 420

gccggaggcg cgttttactg 440

<210> 4508

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A8

<400> 4508

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gcaagaaata ataatggaga cgacgacgaa gctccggtgg agccggcccg gctccttcct 120
cctcgtcgcc gcggcggttc tggcggtccg cgccgcgtcg ggcgtcaacg tcggccagtt 180
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gcccgaaccg tacaacgtca ccaacagctt caacgccgcc gtccacagag ctgtcagcag 300
cagtcggcgt gagatgcggg agaggccgag gaagcacaag aagagggggc catgccgggc 360
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cctg 424

<210> 4509
<211> 405
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-B10
<400> 4509

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tgaatatttt tcccaaacag atgaaatcca tataatccca agaattcatg taatggaaac 180
catgtttgat gtggattcaa agccaaaatt tcataagctt caagaagttg aaaccaagga 240
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tgaagcta atagagacct tgaccaaac caatatacag gaagacccaa acacatctga 360
caatgataac aagcacacag atgagcctcc agaaaaaatt gattt 405

<210> 4510
<211> 83
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-B11
<400> 4510

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agtgtggcaa ggctcgtcatc gtc 83

<210> 4511
 <211> 424
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-033-Q1-E1-B12

<400> 4511

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 cggcgggcggc catcgtcggc cacgacggtg ccgcctgggc gcagagcacg gcgttccccg 180
 agttcaagac cgaggacatg gccaacatca tgaaggactt cgacgagcca gggcacctcg 240
 cgccgacagg cctgttcctc ggacctacca agtacatggt catccaaggc gagcctggtg 300
 ccgtcatccg tggcaagaag ggatcaggag gcatcaccgt gaagaagaca gggcaggcac 360
 tcgtggttgg catctacgac gagccgatga cgcctgngca gtgcaacatg gtggtggaaa 420
 ggct 424

<210> 4512
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-D5

<400> 4512

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 ccattgcgcg cgatccggct cgttcttgtg atctatctag ccgtttcttg ggtcagtgtc 180
 ggaagggtcaa actgttggtg gaaacctcac cggggtgctt caacgaacgc gaagggtgtc 240
 ctgtcattta gcgcgtcttg attggatttg acctgttggc ctggtggcgt gttgtcgttg 300
 attgagctcg aggatgatga aatgggggct cagcagcggc acgcccgcgg attcctacta 360
 cgagggtacgg tcagattgca cggacggtgt gcccaagagc aagttcaaga tcaaggctgg 420
 c 421

<210> 4513
 <211> 424
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-D6

 <400> 4513

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 tgcaaaatcc ccaccgccac agttcaaate acctgcacca ccaacttcga gaagatctcc 180
 acctccaccg gtgaagcccc cgccaccacc gccacttgta agctctccac cactgccacc 240
 aatgacctcc ccacctccac caacaccggc gagctcaccg cctcctccag tgaggtcccc 300
 tctccaccg gcgccaataa actctccacc cccaccggtc aaatccccac caccacctgc 360
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 accg 424

<210> 4514
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-038-Q1-E1-D8

 <400> 4514

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 gaagcgctgg cgtgtggcac actacattcc gagcatcatc tgtgtggcca tcgcctttgt 240
 ggtgccggcg cgcataccca tcgacatgtt cgtcgggagc ttggtgctgt acctgtggag 300
 gcgtgccgac cctagcaagg cgccgacgtt ctcatggcg gtggcgctcag ggatgatctg 360
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<210> 4515
 <211> 420
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E1

<400> 4515

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ccttttgctc attctgcggg gaacttctct gagtgtagat ctgcagcact aacactactg 180

caaaaaggaa atgaggggatg tacatatcat gaatgccgcc ttggagcagc atttgtacca 240

taattggaag ggaaattttt ggcgacagaa aacttttacc atacttcaaa gttcttttgg 300

ctgagttcga agcccttctt ttctgatctg atggtggctg gggagaaatt ttgccatggg 360

gattggtcaa agattaaaaa taagtacagt tcctttgatg acggacaact gcttcttttt 420

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<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E10

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acgtcggcgt cactctacac gacaaggagg gcatttctcc agacaagcag ctctcaatt 180

gtgccaggat gcacctcgac gacagtcaca cggtagcaa ctacaacatt cagctggata 240

gcacgcgcca catgcagctg cttctcaaga gccggatgca catcatcatc aacactctgg 300

tcgactcgac taacaccctt gatgtcgtct ctgctgatat caatgataat gtcggcgtca 360

ctctggacga ccaggagggc atttctgccg accagcagc 399

<210> 4517

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E11

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acatctccgg cagctcgctc acgcccgaag cgcgcagcct gctctgctcc gagacgcagc 300
cgtgcagcgg cgtctcgctc atcgatgtca acgtcgagta cgccggcaag aacaacaaga 360
ccatggctgt gtgcagcaac gcccaaggga cgcgaaggg aaa 403

<210> 4518

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E12

<400> 4518

ccacgcgtcc accacgcgtc cgctcccccg ccggccaaca actcagccgc cgcaaccgcc 60
acatcagcca tgggcgcctg cgcaaccaag cccaagacgc ttgaggggca ggccccagct 120
gaggccgccc tctccacacc caaggttgcg cccgaggcca ctccaatctc cgttgaggtt 180
gcggctgatg aacaggtagc tgagaaggtg gtggtggagg agccggctgc ggcgccgac 240
gttgagcatc agaaggctaa tgaggtggtc gtcacagagg cggccgctgc cgagcccgat 300
cacaaggagg aggaagccgt ggagaagacc gtcgtcgagg aggagaagcc agcggcagcc 360
gccaatgcag aggaaaaggt cgccaccgcc gccg 394

<210> 4519

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E3

<400> 4519

cacgcgtccg cgctctgtcg cccttcgttc acctctcctt cctctcgtcc ctgcctgcc 60
gggagagggg aagtcagagg cacggagtgg cgcagagcag acgcccgtga accattgtag 120
ctgtccctgt cgctcgtcgtc gtcaacgaac ccacacaagg aaaggatgga gaagaagccg 180

accatcctca tgaacaggta cgagctcggg cgcacgctcg ggcagggcac cttcgccaag 240
gtgtaccacg gccggaacct cgcgtccggc gagagcgtgg ccatcaaggt catcgacaag 300
gagaagggtga tgcgcgtcgg catgatcgac cagatcaagc gcgagatctc cgtcatgcgc 360
ctcgtccgcc accccaacgt cgtgcagctg cagcaggtga tggccagcaa gagcaagata 420
tacttc 426

<210> 4520
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E6

<400> 4520

ctcccggtc gacacacgcc tctagtgaca gtccccggag acagcccaa cacgcatggc 60
atccacatgg gcgactcatc cgggatcacg atcaccaaca ccgtcattgg cgtcgggtgac 120
gactgcatct ccatcgggcc cgggacctcc aagggtgaaca tcaccggcgt gacctgcggc 180
cctggccacg gcatcagcat cggcagccta gggcgggtaca aggacgagaa ggacgtcacg 240
gacatcaacg tcaaggattg cactcttaag aagacgatgt tcggcgtccg catcaaggcg 300
tacgaggacg ccgcctccgt gctcaccgtc tccaagatcc actacgagaa tatcaagatg 360
gaggactcag ccaaccccat cttcatcgac atgaagtact gcccacaaa gttgtgtact 420
gccaacggcg cct 433

<210> 4521
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E7

<400> 4521

cgggtcgacc cgcgcgtccg gatatccgga gcttgcagca tttgccagat gtactgagaa 60
aggctgatat tcataagatt caggcagagc ttgtgtcatg tcttccgtcg ttacctcacc 120
tttcagatct acaaaagctg aaggatgagc tgaagacctc ttggaattct atggagggtc 180
ttccatctct gtcccgttgg catctcttgg agttactcgc aaattgtctg ccacacagat 240

ttacccatcc caatgaaaca agtttgtctg ttcttcaaag catgaaggag gatctagcaa 300
gcctgattgc accgcaactg attagaccaa ttgcgcggtg gccattctat gccttcttgg 360
gaggagccat gttctgctc ctggccagca tcacttg 397

<210> 4522
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E8

<400> 4522

ccacgcgtcc gcccacgct cgcctcgtc tcacctccc tccctcacac aaataataag 60
gaaagggtccc gcccttttcc tccgacatcc acaagggggg aggggaaaac acgtacattc 120
acccggcggc aataatggcc tcggttcggg ctccggcgac gacgaccgcc gccgtcatcc 180
tatgcctatg cgtcgtctc tctgtgccc cggctgacga cccgaacctc cccgactacg 240
tcattccaggg ccgcgtgtac tgcgacacct gccgcgccgg gttcgtgacc aacgtcaccg 300
agtacatcgc gggcgccaag gtgaggctgg agtgcaagca cttcggcacc ggcaagctcg 360
agcgcgccat cgacggggtc accgacgcga ccggcaccta cacgatcgag ctcaaggaca 420
g 421

<210> 4523
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F1

<400> 4523

cgggtcgacc cagcgtccg catcgacggg gtgaccgacg ggaacggcac gtacacgatc 60
gagctcaagg acagccacga ggaggacatc tgcgaggtgg tcttggtgga gagcccgcgc 120
aaggactgcg accaggtgca ggcggacagg gaccgcgccg gcgtcctgct caccaggaac 180
gtcggcatca gcgacaacct gcgccccgcc aaccgctcg gctacctcaa ggacgtgccg 240
ctgcccattc gcgcctcgtc gctcaaacag ttggactcgg acgacgacga cgatcagtaa 300
tagcacatcg acgacgacga tcgatatgta atagcacgtc gtcgacgacc gaccgcagtc 360

gtcgcagact ggctggcact aaaccacaaa tcctcttcac ctggattaca aatatgtaac 420
 tgagaaagga aagga 435

<210> 4524
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F10

<400> 4524

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 agtgaaggcg gcgggcgtgg ccgcgctgct tgtggtcgca gtggtgtcgc ctgccgcgcg 120
 cgcggcggcg gtggcggtgg cgggaggggc gccgtcggtt ccggcggggtc cgctggacat 180
 cgcgagctg ggcgccaagg gcgacggcaa gtcggacagc accccgatga tcctcaaggc 240
 gtggaagaac gcgtgcgagg cgacgggggt acagaagatc gtcatcccg cgggcaacta 300
 cctgacgggc gggctggagc tgaagggcc ctgcaagtcc tccatcatca tccgtctcga 360
 cggcaacctg ctcggcaccg gcgacctcag cgctaccaa aggaactgga tcgag 415

<210> 4525
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F11

<400> 4525

ccacgcgtcc actgctatta ggaaacagtt gcttgaggaa ttttcagcag atgacagctg 60
 tctgggatct ctttttactg aaacaccttc acagtatcca gcacaaaatg ggaaactgca 120
 ccataagtct atggaggtta ttccattggg atttgTTTT gaagatgata ctctcgctga 180
 agcatctgac agctcagtag aacctcactt gcaacatccg ccatgtaaca acattcttga 240
 tgtcaatcgg cttcttgatt cagttttgga aacatctcag catgttgga ggtcgtcagt 300
 gtcaacaaac caggatctgc ctttcaagga cgtagccaac caatgtgaag cacttctgat 360
 tgggaagcag caaaagctat ctgcgtgcat gagtgtctgt taaaa 405

<210> 4526

<211> 405
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-F12

 <400> 4526

 ccacgcgtcc gcgaccatgg agaaaaccgg cctagcttga ccgcttgcaa ttcaaggagg 60
 ctagctagat agcatgtata taagcccgtg cgcggtgtgc ctttcctctc atcaccatcg 120
 cctggaacca cagaccacaa aggagggggac acacacacac acacaccgtc tccgcccggc 180
 cgccgcgacg cgccatgggt atggctcgct ccgtcgcgca cctcttcttt cccatcctcc 240
 ttatctccac cgcgcccggc gtgcggggcca tcaccgacgc cgccggcggc cccggatacc 300
 tccaggaggc gtgcaacaag acgctgttcc ccaagggtgt catgcacgcg ctcaaggaca 360
 acccagagtg ccaggcggag acggcgggtca cgccgcgccg gctgg 405

<210> 4527
 <211> 448
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-F2

 <400> 4527

 gccggtccta aattcacggg tcgaccacg cgccggagc tcaccgccgt cctaccttca 60
 tatacctagc agtgtctctg catagaaaga taaaaggtag gaggaggcgc agtgcgtggt 120
 gggattatct gtgaggagat attggagtta ttatatatat atatataagg agacgataga 180
 tagacagcta gatctatata accatgggtg atgggttccg atggatcaga ccgggctctt 240
 tcgtcctgta cttggtcttc ttcttctgt ccgcagccct gtcggaggcc aatatcggcg 300
 atttcgatga atactggcag cagcgcaagc tcattggcca cgccgcgggt gatgccacgt 360
 acaagcatga cccggtcgag gtcgccaacc aacttaaccg tgcagtccac agatccgtcg 420
 agaaggagga cattggcacg aggcggga 448

<210> 4528
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F5

<400> 4528

aggtccagaa ctcccgggtc gacccacgcg tccgctttgc atcatccaat actatgtaga 60
gagcgagag ggccgtcacc tgggtccgctc gccgttgtgt ccattcgggg caaacacaga 120
gacctcgga gctgcccga cctccatcga gcggaacgga agaattgggtg gagaacagag 180
aaactccacc gccatggccc ggcgcgcgc ctcctctggt gactgggtac cgctgccatg 240
tgccgtgcag tgcgttggtg ggatcctgtc gtcgtgggtg gaatccagcg gccctgggta 300
attcgggtgt gcgcccacat ttggcctcgg tgaccagcta caggattccg ccgacatctc 360
cagtgcaaat catgtggtca ttccgggtgg attgatgccg ggggaccctg ggattgttca 420
ccgaaaaatc tacacagcgg caaag 445

<210> 4529

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F6

<400> 4529

ccacgcgtcc gctttgcaca ggggagaaaag gaattgcaa gtccggcaag cctctgtggt 60
acaaggggtc gacgttccac aggatcatcc cggggttcac gatccaggga ggcgacttca 120
ccaacggcaa cggcacgggg ggcgagtcga tctacggcag caccatcttc tccgacgaga 180
acttcaagca caccacgct aaagccggtg cgctgtccat ggctaactac gggcccgaact 240
ccaatggctc ccagttcttc atcaccaccg tagacgaaaa ccggttgccc aagaagctgg 300
acgggcgcca cgtggtgttc ggcaagggtg tgaaagggat ggacgtcgtg cgcaagatcg 360
aagccgaggg ccagctcacc ggcgtgccca aggccaaggt cgtcatagcc aac 413

<210> 4530

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F8

<400> 4530

ccacgcgtcc ggttcgacat caagtccggc acgtccatgg ccgcgccgca cctgagcggg 60
atcgccgcgc tgatcaagca cgcgcacccg acctggtcgc ccgcggtcat .caaatcggcc 120
ctgatgacga cggcggagcc taacgacaac .ctccggaagc cgatccagga cgtcaacggc 180
aggccggcga acttggtcgc cattggcgcc ggccacgtga acccgaagaa ggccatggac 240
cctggcctcg tgtacaacat gacggccatg ggctacgtgc cgtacctgtg cgggctcaac 300
tacacggacg acaaggtgag cacgatcatc taccggagc cgccggtgtc gtgcgccaag 360
ctgtcaaggc tcgaacagga cgacctcaac taccgtcca tcagcgtcat cctcaaccag 420

<210> 4531

<211> 446

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-038-Q1-E1-G1

<400> 4531

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cccgcccccg cccccgcccc tacgagcacg acggcctccg gatgaggggtc ctgccgcgtc 120
ttttaccgtc agctggatgt caaatcacia cgcgccctgt gacatcccca agccggcctc 180
cgtcgacgag ttctctgcca agaattggcaa gaagaagaag tccttcatgt cgggcctctt 240
ccgcaagaaa gggagggggcg cggacaagaa gctgctctcg cggcgggaca tcgtcttcga 300
tttgaaggc agaagcggcg acaggatgga cctcttgag acgtccgccg ctgtccgcaa 360
gagcttctca gatcggcact gcacgacgcg gatcgagaac ctgacgctga gctgcctgga 420
ttctcncagg agaccaatg tcgaca 446

<210> 4532

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G10

<400> 4532

gtctagaact cccgggtcga cccacgcgtc caccacgcg tccgcttgct cctcgatcca 60
tcaattgcaa gaggagcaag ataccaccac cgtagacca cagcaggta cgaagaaggc 120

gacgaacatg gcgaggctgg ccttggttagc ggcggtggtt ctgtgccttc tattagcgac 180
 agggccgcag ggggccgtca ggcgcgaggg gatggtgtca tttgacaatt tgatcagctg 240
 caaggtactg ggcaactgcg ataagaacct gggccccgag gcctcccgcc cagggaaacc 300
 cgccaacgac tacacccgcg gctgcaacct gatcaccggc tgtcgcggct gatcatactt 360
 ctctggtcga tgtgcgcgca atgtcaatgt cgcacgcgcg tgcaggtacc aggccttagc 420
 gtgtggtg 428

<210> 4533
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G11

<400> 4533

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 ccatcggtga ccatggattg aagacattga tcggcttctc tggaggtgcg tgtgagcagc 120
 tcggaggtca gccgccgaga agagctcata ggcaatggca accgcaagga aggatcctca 180
 gcaggttgat aaagtcaacc tgaaaccag cgagtctggc aaaggggtag tacggcgtgc 240
 aaggtctgtc ccgacctctc cggatcgag atcgccccca tccccggccc cagtctcaga 300
 caacgccagc cgaccggcat catcactcaa cactcgacg acctcgtccc ggtccacaac 360
 aacatctagc tcggcggcct cttcaagcca cggaagacg atgcgctccg cttcgtcgt 419

<210> 4534
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G12

<400> 4534

ccacgcgtcc agcctcctcg tcgcgttact gcccggcact gggaacgcgg tggggaagaa 60
 gggtgacgcc gtcgtccaca ctctcagcta accagtgcct gggccgcggt tggccacggt 120
 gggcgaccct ggtggttcac cggtgactg cgaatctagg cgggtcttcc tggggctcga 180
 tctgggtctc atggttggct aatttctcac cggagcattt gggggacggg ccgtgcgcct 240

ccaatttctc gccgtcgacg tgttctccgc cgcgggacta cagcgtgcc a tgggcgggac 300
 tcctgggagc ttaatccgcg cgcgaggta cagatcacct gaagatcatc ctggtacctg 360
 gaatctcaag tcccaggta agagcaggta ccacaggatg 400

<210> 4535
 <211> 320
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-038-Q1-E1-G2
 <400> 4535

gggtcgacgc acgcgtccgg gatgactcgc aacatccaat aagaggcagc cagagaaact 60
 aataaaactc tcaccgccgc gatccgagag aacaagccag ccgaccccg t cccaaggca 120
 atccgtcgcc gacgtaccac cgccagcgca agagcgagat ggagatgaat aggatactct 180
 tcgccgtcct cgtcgtcatc gccgcctcgg tcaacgcagt gctggtctcc accgaggccg 240
 ccgccgcggg cgccccaact gccccgagt cgtcgagccg atgctcccg tggcgctggc 300
 gctgcgcgca gccgctggcg 320

<210> 4536
 <211> 335
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-038-Q1-E1-G3
 <400> 4536

gcacgggtccg agactcacgg gtcgacacac gcgtccaca c gactacctc gacgtcgtcg 60
 gccactgaaa gctgccgcgc gcgcgcgcgc gccgacccg t ggaccatgcg tgcataaga 120
 agaatgcagg ggggtgggctt gggcctgtaa cctgttaatg gatcggattc tcggtgcaa 180
 ttcgtgatct tgaccggtct aagaagatgg ggacttgct ctttgtttca ttggttatta 240
 tttctactag tgtgtatatg gtaaagtcgt gtgctgtgaa cctgcgatca tttatcctct 300
 gttcattgaa ttgaagcaat cccctctccc gtcac 335

<210> 4537
 <211> 419

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-038-Q1-E1-G5
 <400> 4537
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 cttcaggaac accatgtggt ggaggaacgt caagctcaca gctgcagtga tattcatcct 120
 caccgtaatt gtgtacgtcc tgctcgcta catgtgtcgc ggcttcacca taccgtcatg 180
 ctttccgtaa tctccatccg tcccgggtgcc agtgcggaacc accagcccta gctctagctg 240
 cgtcacaact tggttttccg ggttctgtaa cagcagcagc ggtgctgcag ttctttctct 300
 cttgtacgag ggaaacaaca gctcattctg aagtctgca acaaccagat ctgatttttt 360
 ttaaaaaaaaa agatggtagt caaatgggaa agctttccca cctgattttt tatcattaa 419

<210> 4538
 <211> 189
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-038-Q1-E1-G6
 <400> 4538
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 ctaatcacta gtataaagca tgcggagaca gccggcccct ctggcctcgc tgctccccct 120
 tctccccgt cccacccat atgcctgac tacgaacctc ggcgccctgc gcaatctgag 180
 ttcacccac 189

<210> 4539
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-038-Q1-E1-G7
 <400> 4539
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 ctgcgcatca agtcgtacga ggactccaag tcgtcgctca aggccagcaa gttcctgtac 120
 gagggcatca ccatggacaa tgtctcctac cccatcatca tcgaccagaa gtactgcccc 180

aacaacatct gcgtcaagtc cggcgccctcc aaggtggccg tcaacgacgt cgtcttcaag 240
aacatccacg gcacctccaa cacgccggag gccatcacgc tcaactgcgc caacaacctg 300
ccatgccagg gcgtgcagct cgtcaacgtc gacatcaagt acaatggatc cggcaacaag 360
accatggccg tctgcaagaa tgccatcggc aagtccatcg gcttggcaaa ggagctggcg 420
t 421

<210> 4540
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G9

<400> 4540

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catcgatgcg aaagcgctccg ggcctggtgg gtccttcgac atcaccaagt tgggcgcctc 180
cggcaatggc aagacagaca gcacgaaggc tgtgcaggag gcatgggcat cggcgtgcgg 240
cggcactggg aagcagacaa tcttcatacc caagggtgac ttccttgtcg gacaactcaa 300
cttcacaggc ccttgcaagg gcgacgtgac catccagggt gatggcaatc tgctggcgac 360
cacggaccta agccagtaca aggaccatgg ta 392

<210> 4541
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H10

<400> 4541

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catggcggca acgacgacgg ggatgcagat gatgcaggcg gcggcgttgc tgctgtgctt 120
ggttggtgtg gcggcgtcta cgcggtcgc gctgggcaac tgccgcgacg actgcatggc 180
tgcatgcaac ggctggacca tcgtctgcca gctctcctgt gccagcgcat gctacggaga 240
agtcgggatc acaaccttag gtacgtcggc tgtattagcg aaagcagaag cgctgcac 300

agcaccacaa gcagcacaag agcgaggcgc cgccgccggc gtgtccgcgc tcagaggggt 360
 caagctatca tcaccgacga cccgtggccg tggatgaatt aattaaggcc ccatgcatca 420
 tgcattg 426

<210> 4542
 <211> 427
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-038-Q1-E1-H12
 <400> 4542

ccacgcgtcc accacgcgtc cggatcatccg tggcaagaag ggatccgggg gcattcactgt 60
 gaagaaaaca gggcagtcac tcattcattgg catctacgac gagcccatga ctcccgaggca 120
 gtgcaacctg gtggtggaaa ggctggggcga ctacctgctc gaacagggga tgtaattgaca 180
 accccttccc ctggaatgca tgttgatgat gttgctgggt ccaacttcgt tttcagtaat 240
 aacaacaaag cgaagacct cctacctacc ctatttgctt gagcggctct tgtccgcgcc 300
 acaagatacc aattgttgcg ctgggaatat tcagttacga tgaccgctt tagttcagtt 360
 tttttgtttt tggggttggt tcgatcattt ggctgtancg tgaatcgcat ggacaacaga 420
 ctccaat 427

<210> 4543
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-038-Q1-E1-H2
 <400> 4543

gtccgaaatt caccgggtcga cccacgcgtc cgcgaattcg aaagcatcag gcaccatgaa 60
 ctaaccagag aatcttgaca cagtttgtac gacgacggtg atgctgttga tgccgagatt 120
 tcagaattct taattctcta cactgttctg agttacttta tgcactgttt catccatatt 180
 aaattaaatc ctgtgttggt cagataataa tagaaatcaa tacagttatt tgtatcctta 240
 gaatttgctc caaaatcttt tttttcaaca ttgataattg tatgtatact aaataaactc 300

gttcggggaa ggaatgactg ccctcccggt attatgctaa gaagagaccg aaaaacaatg 360
gtcccgggcg agaaacttcc cgaaccctga cccctatcat taacgagccg acgtcaaccg 420
ttcactctgc aacg 434

<210> 4544
<211> 355
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H3

<400> 4544

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cattcgtttg tgcagctgat tacgctaggt ctatttacgc aactgtcgtg tgtcgaattt 120
taacagcgac ggccatgcac caaaccacca cccacacat cattttcttt cttcctttct 180
tttgattcga cgacgcctgt gattcatgca tgctctcgat cgaagcaaag ctgttgatg 240
ttgttatggg gtactgtttt tttattattt ataaagtttt gataaaaaac atgtaaacaa 300
aacaatcaca tacatcattc aaggatacaa ggaactacag tatttggtat gtcct 355

<210> 4545
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H5

<400> 4545

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atgaagagcc gcagcatggc atcatcggcc gcgctcttgg tgctagccct cgcgctagt 120
gcgggccaccg cccacaggt agcggaggca aagaagaaga gagcggcgga gagcggcgag 180
gcgggcgagg cgaagaagat ccaggacgac ttctgctcga cgctgtgcga gggcaagaag 240
gggacggacc tggtcgtgtg caaggagtcc tgcgcgctct cccagcaatc caacctggtg 300
ctgtacggca ggatccagtg caagggcaag tgcaccgagc agaagggcat cacggcgccg 360
gccatgaagg tctgccagga ggagtgcgac aaggcgtacg tgggtgaaggc ggccgaagtc 420
acca 424

<210> 4546
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-H6

 <400> 4546

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 ggaggcctgc gcggcgaggg cgttcgccgc ggcgtccaac gcgacggcgc atggggcgac 180
 ggtggtggcc gggaagctga acgtgcacct ggtgccgcac tcgcatgacg acgtcgggtg 240
 gctcaagacc gtcgaccagt actatgtcgg atccaacaac agcatccagg gcgcgtgcgt 300
 gatgaacacc ctcgactccg tggtcgacgc gctcgccagg gaccccgccc gcaagttcgt 360
 cgtcgtcgag caggcttttt tccaaaggtg gtgggcagag aaaatcgcaa acattcaggc 420
 agtag 425

<210> 4547
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-H7

 <400> 4547

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 catgatggcc gagatcgaca ccgacggcga cggctgcatc gacttcaacg agttcatcac 120
 cttctgcaac gccaaaccgg ggctcatgaa ggacgtcgca aaggtcttct gatccattac 180
 atcttcgtcc atacgatata atcgatgatg aacctgctta tatacacaca catgtaccat 240
 tcagctccaa catatgatgt cgatcagctt gcctgcctcg cctggcttaa tgctgtcctt 300
 cgccttccta taagcactaa gctattatta ggattttgtt ttattttaact tttttttgtc 360
 tccaatctaa tatatgtgga cgttcttttt tattcatttt ccccctatgt tggttcgat 419

<210> 4548
 <211> 438
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H8

<400> 4548

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cacatccagc cagccaacaa aaatgtcgcg cgtcacagct gcggtgctct ttacatcct 120

cgccgttgct gccctcagcg cggccgaggg cccggcagag tcaccgaagg aaggcagtgc 180

tgccaaggca cctgaggctg ccaagagaac tgctgcccc gctgaagcac ccggagccgc 240

gtccaccccc gtcgccgcgc ctgccccatc atcgtcgtct aggaagtctg gtccagctac 300

cgcgccagcc accgcctcta ccccccttc ttccacggac gaggagtga gcccttcccc 360

gccagcatcc accgccgcgg cgtccccctgc ggctgagggg ccggctgctg atgactccgc 420

cggtgctgct gcccttgg 438

<210> 4549

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H9

<400> 4549

ccacgcgtcc agtggttgtg gccaatcctt ctctatctc gtcccggagt cccgggggaa 60

attttgcccc agaaacacta gcgcgtcgga tcacaagcaa gggcgaaaat tttctgtggc 120

tccagcggct gaaggacgct gcggcaccca tgctggccat cgaccgatca ataaataaac 180

atggacagaa tcgaattggc aagcaggacg aactggtgg ccgcgtcta cccaagttcg 240

gcgagtggga cgtgaacaac cggcggtccg cggacgggtt cacggtcatc ttcagcaagg 300

ccagggacga gaagaaagct cccccgacct aaggccacat caggaacaac aggtcgggtg 360

cggctgacag caaggactcc agggccgaga agatgacctc ctacaacgcc aggaccaacg 420

cg 422

<210> 4550

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A1

<400> 4550

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gccccatggc cgccatggct cgttccgtct cctcgtcgt ggcgcccctt ctctcctct 120
cctcctcgt ctccgccgcg gccagtgcgc ggaccgtggg cgacaccgtg caggacgcgt 180
gcagcaagac ccagttcccc aagatctgcg tggacagcct cgccgccaag ccggagagcc 240
agaaggcgac gccgcgcaag ctggcggagc tgttcgtgaa catcgcggcc gagaagggat 300
ccgggatgg 309

<210> 4551

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A11

<400> 4551

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gggcgacggg ttctacggcg gcataaggaa gctccgcggc aaggatgaca tctccaagtg 120
gaggcagctg tggccaacag acgtcctgga gtaagcagga gccgcatccc ttctcacacc 180
gagattgac catcgctcaa atgacacgcc tttctttcat catattgacc aaattcgtcg 240
tctctgtcgc gctgttgtaa acgggttagc agaagaacac acagggtgac aacaaatcct 300
tgttcggtta tttctaatac atatggattg gatgagattg gaaaaaatta agaagaagtt 360
taacttgttt gcgattcaaa cacatccaat ctc 393

<210> 4552

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A4

<400> 4552

gggtcgaccc acgcgtccga ggcacccgat ccactctggg cgggcgccgc gcgtcgaggg 60
ccagccaaag cttgccatgg cggccgtccg gtccgacagg gtccaccacc accaccgccg 120

ctccgaggcg tcgtgtccgg caacctccgc ggccgtggcg gcggcgaggg ccgatgacgc 180
cctgcgccag cggccgcggg ggctcgtgca ggtccgggag cgggaccagg gcccgtgtgc 240
gacggggcac cagcacctgc accaccatca ccaccagctg cggcggtcgg cggcggtccc 300
accccgccgc ccggggccgg ggcgccgcc tcctcagcgc tgcgaaagcg acctcaacat 360
cagggagcac cgctcctgca gcgaggtggc cggcggcaac gcggccggct gcg 413

<210> 4553
<211> 361
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A5

<400> 4553

gagtcgtagt agaacgcgac gctggccagg ttctcgcagc agtacgcgga gacgctcaag 60
ggcaactgcc agcagatcca ctgcgtcgtc ccgtaccggg agaacctgat ggagggcacc 120
ccggggctga cctggaagat caccgtggac ggctggagcg atgagaagaa gaactaccac 180
tagaactcat acacctgcga ccccggaag atgtgcggcc actagaaagc cgtcgtctgg 240
aagaccacca ccagcgtcag ctgcggacgc atcaagtga acagcggcga caccatcatc 300
atgtgcagct actggtcgtc ggggaactac gacggcgta agccatacta gaatatatat 360
c 361

<210> 4554
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A7

<400> 4554

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aatggtgaac ggcaaggcgt acagcttcga gaagatgcac tggcactcgc cgtccgacca 120
caccatcaac ggccagaggt tcccgtgga gctgcacctg gtccacagga gcgccgacgg 180
cgcgctggcc gtcateggga tcctctacca gctgggcgcc ccggactcct tctactacca 240
gctgaagcgg cagctgggcg acatggccaa ggaccggtgc agcttcggcg aggaggagtc 300

gcacgagggc gtcgccctca tccacctgcg ctcgctgcag aagcgcaccg gcagctactt 360
ccggtacacg ggctccctca ccgtgccgcc ctgcaccgag aacgtcgt 408

<210> 4555
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B11

<400> 4555

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gcgaggacac gtacctcccg gaggtcgtgc tcaacatccc gcacaaccgg tcaatggcca 120
gcgcgcggga cgaggccgag atggtcattg tcggcgcgct ggacgagctg ttcgccagga 180
ccgggggtgcg gcccaaggag atcggcgtgc tgggtggtgaa ctgcagcctc ttcaactcga 240
caccgtcgtc gtccgccatg gtcgtcaacc actacaggct ccggggcaac gtctcgagct 300
acaaccgctg cggcatgggc tgcagcgcgg ggatcatcgc cgtggatctc accagggacc 360
tgcgtcagtg ccagcggggc aactacaccg tgggtg 395

<210> 4556
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B12

<400> 4556

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caagctcaac aacagccagc tcgcgaaaat aatgaagagc cgcagcatgg catcatcggc 120
cgcgctcttg gtgctagccc tcgcgctagt ggcgccacc gccccacagg tagcggaggc 180
aaagaagaag agagcggcgg agagcggcga ggcgcgagg gcaagaaga tccaggacga 240
cttctgctcg acgctgtgcg agggcaagaa ggggacggac ctggctcgtgt gcaaggagtc 300
ctgcgcgctc tcccagcagt ccaacctggg gctgtacggc aggatccagt gcaagggcaa 360
gtgcaccgag cagaagggca tcac 384

<210> 4557

<211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-B2

 <400> 4557

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 atgctttgca aaatactgag ggaaatgacc ttgcgaaggt tctgtggctg aagagtcgaa 120
 cttcgggaagt atggcttgag cgccgcacaa actacgctag aagcctggct gttatgagca 180
 tggttgggta tttgcttggg ttaggagatc ggcaccaag caaccttatg ttagatcgct 240
 atagtggaaa aatattacac atcgacttcg gagattgctt tgaggcttca atgaatcgag 300
 aaaagttccc tgaaaaagta ccattccgtt tgactcgaat gcttgtgaaa gctatggaag 360
 ttagcgggat tgaggggtaca ttccgaacaa cttgtgaaaa tgtgatgcaa gtccttcgca 420
 caaacagaga cagcg 435

<210> 4558
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-B4

 <400> 4558

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 ccaataatct tgcgtgtcat tcgtacatcc tgggtggcgat cgcgtccacg ctccgtacgg 120
 tgctcgaca ccacattaag tctctatggc gatgcagatg gtcgcctgcg ccgtactcac 180
 cgttggcgcc actgccaccg ctggtcgtcg cgaactatgc cacggcgccc gaatcaagca 240
 gcttctctgc aggcgattac ccggacttac gcaccttact tagctcctca ttgcgcacca 300
 tcggcgcata ttagtcgtga tatttctcca ggacgtctcg agggagatgc tgcaggctgc 360
 aactggatgt atg 373

<210> 4559
 <211> 420
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B6

<400> 4559

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cttgttcctc ctggctcctct tctgcatcgt gcatggtgag aaggaagagt caaagggcat 120
cgatgcgaaa gcgtccgggc ctggtgggtc cttcgacatc accaagttgg gcgcctccgg 180
caatggcaag acagacagca cgaaggctgt gcaggaggca tgggcatcgg cgtgcggcgg 240
cactgggaag cagacaatcc tcatacccaa gggcgacttc cttgtcggac aactcaactt 300
cacaggccct tgcaagggcg acgtgaccat ccagggtggat ggcaatctgc tggcgaccac 360
ggacctaagc cagtacaagg accatggtaa ttggatcgag attctacgcg tggataacct 420

<210> 4560

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B7

<400> 4560

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atgtaactac tacgtaccag ctggaatgca tgtcgacgac gatggtttcg agtttcgact 120
tccaataata gtaacaacaa agcaaaggcc ttctcccg cgtatttgct ttggctcttc 180
tcctccacgc cataagatat ctagcaattg gtgactcgcc ttaattagtt cgctttgctt 240
ttgaggttga ctcgaccatt ttgctgtagc gtgaattgca tggacatgca acgctccaat 300
ggcctttgga atgtggaaat tttttttccc gtttctgtat ttttcctata aaatgaagta 360
atgaactggc tcttata 377

<210> 4561

<211> 271

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-C10

<400> 4561

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tccgtgggag ccttcggctc tctttccac agtgcataatg agccgtgggg gcagcgcggc 120
 tggcgggcag agttctcagg gtcacctcgt tggggtcagt aagccttccc acgtaagcag 180
 tgtgactggc tctaagtggc cgagctgtag ccgcaggtga tccaccagat gagggggaga 240
 gtgtgacggc ccctgacggc accagtcaca t 271

<210> 4562
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D5

<400> 4562

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 tcttcgcgtg tttccctctt tttcttaggc cgccctctac acttctcgac ataaccatcg 120
 agagggcggt cgagagaaac gagagcggca gacaccatgg ggagctcgag gaccatcggt 180
 gcgtccccc tgctctcct cgccctctc ctcttggtt tcgcggccac cgccgaggcc 240
 cgcgttggtc ccgagctgtt tggcgaggac caattccagc ggacatgcaa ccaggtgcac 300
 ttcaggaaga tgtgccagag cttgacgaag ctcccgaagg ttacaacgcc gcgccaactg 360
 gtgccaacct tcaatccct tcccgcgggg aagggccagg gaggccagaa gccggttga 420
 caattcccc gcaaggaacc acaa 444

<210> 4563
 <211> 439
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D6

<400> 4563

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 gcaaccaagc ccaagacgct tgaggggcag gcccagctg aggccgccgt ctccacaccc 120
 aaggttgccg ccgaggccac tccaatctcc gttgaggttg cggctgatga acaggtagct 180
 gagaaggtgg tgggtggagga gccggctgcg gcggccgacg ttgagcatca gaaggcta 240
 gaggtgctcg ctccagaggc ggccgtcgcc gagcccgacc acaaggagga ggaagccgtg 300

gagaagaccg tcgtcgagga ggagaagcca gcggcagcag cccatgcaga ggaaaaggtc 360
gccaccgccg ccgagaccac gacgacggtg gaggccaaga agaacgccga ggaggccggg 420
aaggagaagc tggcgcagc 439

<210> 4564
<211> 71
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D7

<400> 4564

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gctgctggtc g 71

<210> 4565
<211> 297
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D9

<400> 4565

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gcggtgagcc aagccggcgc acgtcgcccc ggggtcacg ctcaccatcg agcgccagcc 120
aattaataag atatatatat agctacgacg gatcgtcagt aagatggcaa gctccgccgt 180
cctgaggagc cccctgtcag tcctcctcta catgctcgcc gcagtgcccg cgatcgccgc 240
ggcgacgtcg accgacgccg cgatcgacaa ggcgtacgcg catcgcgtag agttcac 297

<210> 4566
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E1

<400> 4566

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gatggcggtg ccacaacctc tcctgctgtc gctgctggtc gccgtgctag cggtagggccgc 120

cgatgtcgcc aacgccggcc acgccaagcc cctaacgcct ggcgggcgcg tggtagacga 180
 caaccacggc aagttcacgg cggggccgtg gaaaccgcc cacgcaacct tctacggcgg 240
 gcgtgacggg tccggcacca cggcgggcgc gtgcgggtac aaggacacgc gcacgcaggg 300
 gtacggcgtg cagacggtgg ccgtgagcac tgtgctgttc ggtgacggcg cggcctgcgg 360
 aggggtgctac gaggtgcggt gcgtggacag ccctagcggg tgcaagcccg a 411

<210> 4567
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E10

<400> 4567

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 ccttcgttca cctctccttc ctctcctccc tgctgccag ggagagggga agtcagaggc 120
 acggagtggc gcagagcaga cgcacgtgaa ccattgtagc tgtccctgtc gtcgtcgtcg 180
 tcgtcaacga atccacacaa ggaaaggatg gagaagaagc cgaccatcct catgaacagg 240
 tacgagctcg ggcgacgct cgggcagggc accttcgcca aggtgtacca cggccggaac 300
 ctgcgtccg gcgagagcgt ggccatcaag gtcacgcaca aggagaaggt gatgcgcgtc 360
 ggcatgatcg accagatcaa gcgcgagatc tccgtcatgc gcctcgtccg ccacccaac 420
 gtcgtgcagc tgcacg 436

<210> 4568
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E11

<400> 4568

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 atgaatgtcg agagcgcttt caccgaggtc ctaactcaga tctatcgtgt ggtcagcaag 180
 aaggcccttg acattggcga tgaccccgct gctccaccaa gagggcaaac catcaacgtt 240

ggtggcaagg atgatgtctc tgctgtgaag aagtcagggg gctgttcac ctaaatcact 300
 tatgaccatg aaaaggaacc atatactctc cgatcatatg attggtaact gaaaatagga 360
 ctctcttggtg ctctctaacc tgttggttat gagattatgt tgggtgtcca gagaaatgat 420
 tagatgttaa gaatttga 438

<210> 4569

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E6

<400> 4569

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 ccgtcctggc tcccccgccg cctttctctc aaatccagcg cgaccaacgg tgacaattcc 180
 ctccccaatc ccatctccac ctctcccacc tcgccgcctt ggtaaacggg ggtggacgtt 240
 aacgggttgc gtcgcccgcc cgcgcctggt tccgccccta ccatccccgg cgaccgcggt 300
 ccccggtggc tgcctcggcc gttcactagc gcggacgtca tgggggcgga ttggaagggg 360
 ctcaagggtg cttaccaggg ttgcgctggg gcgtacagcg aagccggagc aaagaaagca 420
 tacccaaatt gtga 434

<210> 4570

<211> 260

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F5

<400> 4570

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 gcacatcgac gacgacgac gatatgtaat agcacgtcgt cgacgaccga ccgcagtcgt 120
 cgcagactgg ctggcactaa accacaaatc ctcttcacct ggattacaaa tatgtaactg 180
 agaaaggaaa ggaaaacaaa aatgtaactg cgtggctgta ccaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaaaacaaa 260

<210> 4571
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F6

<400> 4571

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 aggagaaatg gcttccgcac acaacgctct ccgggtgttt ttcacctag ccgtgggtatg 120
 tgccgtatgc acagcgaaaa ggacaggagc caacaaggaa gaatcggcgg cagcccccg 180
 tggcgctgct ggaggcagcg gcgggacgtt cgacatctcc aagctcggcg cgaccagcga 240
 cggcaagacg gactgcacaa aggcagtcca ggacgcgtgg acgtcagcgt gcgaagcgac 300
 cggaagcgcc acggtggtga tccccaggc cgaactactg gtcgggcctc tcaacttcac 360
 tgggc 365

<210> 4572
 <211> 441
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-045-Q1-E1-G1

<400> 4572

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 cttttctatt ggtgtgattg ggggcactaa atacctacca cattgcactc agactacata 120
 tactgtgttt gtgtgttgta tgccgtatgc gtgtgtgagc ttgcgcaa at tggacatcta 180
 ggccgtgcgt accctgcgat gaaaggcgcc gtcacggcg catcgaccgt cctggtcgtg 240
 gcggtggtgg ccaccatctg cgtcgtttcc ttcaaaggca gcggcgatgg cgggagggcc 300
 gaggagggcg agatgtccac gtcggtgaag tccatcaagt ctttctgcca gcccggtggac 360
 tacagggaga cgtgcgagaa ggcgctggag gcngcnggcc gggaacgcca acagccccac 420
 ggagctggcc aaggcatct t 441

<210> 4573
 <211> 396

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-045-Q1-E1-G5

 <400> 4573

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 agtctggtcc agctaccgcg ccagccaccg cctctacacc cccttcttcc acggacgagg 120
 agttgagccc ttccccgcc a gcatccaccg cgcgcggcgtc ccctgcggct gagggaccgg 180
 ctgctgatga ctccgcgggt gctgctgccc ttggaagtgg agctgccatc gccggcggtg 240
 ccgctgctgt tgctaccatg atcttcttct actaaactca ccgacgatgg tcgtgtcgcg 300
 gtgagacatt aggggtggaca cgtaattggc tgtgctgtaa tcgctctcgt ctgggtgggga 360
 gggagggnac aagtgtttct ttgctttgct cacttc 396

<210> 4574
 <211> 204
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-G6

 <400> 4574

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 cacatcttgt aacgctgaat tttgattcat ggcacactgt actggacgag gatcattttt 180
 tcttgcttaa gtaaaaggaa aaca 204

<210> 4575
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-G8

 <400> 4575

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 gtccctctct tcattagcac gctaacttgt aatctgcagg atctaagcaa agacttgatt 120

tagttatgga cggattggta ggcctcttga aagttcgcgt ggtccggggt atcaaccttg 180
cctaccgcga cgcaagaggc agcgatccgt atgtcgtcct acggcttggc aagaagaaac 240
tgaagacaag cgtgaagaag agatccgtga accccatatg gcaagaggag ctaactctga 300
ccgtcacaga tcccagccaa ccaactgaagc tggaggtgtt cgacaaggac accttcagca 360
gagacgaccc ca 372

<210> 4576
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-H1

<400> 4576

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accctggtgt cggcaaatga cctcaagaaa gtgtcgtctt tctcccggac tcgcatctac 180
gccgtggctt ccatctccgg attcgacctc cgcattccctt cccacagcac ccaagcagac 240
cacagcaacg gctgcaaccc ctgctggaac gccgtggtac acttccccat cccggctgcc 300
gctgacaccc gcggcctcgc actccacgtg aggtccgcg cccagcgtct atacctgggc 360
gatcgcgaca tcggcgaggt gtgtgtgccc atcgacgacc tcctggccgg cg 412

<210> 4577
<211> 223
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-H8

<400> 4577

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taggagcaac agcaggagca atcccacgcg ttcgatgaca tggcccgcgt cgggtggcggc 120
gccgtgttgg cgctcctagt ggcggtcggg gcggtagccg cgttcgtcgc ggtgctggtc 180
tcggggaggt ctggggagct gagcgccatg gggttgctgg cgg 223

<210> 4578

<211> 225
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-A12

 <400> 4578

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 gaagaagagg gctgccgtgg atacgatcgt ggctgatgcg ggcgacgccg atgacagcgt 180
 cgggatcaga gtgacggcgc gacagctaag caatgggagc gaagt 225

<210> 4579
 <211> 295
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-B1

 <400> 4579

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 tgggtctccg gcaactctct gcagatttct acaagcacgt cttgccgcga cgccgatccg 120
 attagcttgg gcgtcgtcaa gaagcgggtc acggcggacc ccggtagcgc cgccgggatc 180
 atccgcatca tcgtccgcga ctgcttcgca tgctgctgcg acccatcgag cgtgatcgag 240
 ccgatgtcga accaggcctc ctaaatacga gcgggctcgc acatcatcct cgatg 295

<210> 4580
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-B11

 <400> 4580

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 cggcatttcg tcgtcggatg gcgccggcct cctcctcgtc cgccggcgtc gcgtgcctcg 180
 tctgtctcct gctcctgctc ctcgccggcg cctccgcggc gcacggctcg ttccaggcta 240

ggcgtgctct gtcagatgac catgggagcg gtatagtggc gcgatggcgg aggttgctcg 300
 ccgacgctgc gactccagcg aacaactctc ttgtgctggc tgcggcgagg actcaccgga 360
 gcgacccctt cgccaacctt accgcgtaca gcggcggctg gaacattagc gacgagcact 420
 actgggcttc cgtgacg 437

<210> 4581
 <211> 391
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B2

<400> 4581

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 aattctgtgg ctcgatcgat cgatcggctg taaggcaagt gagcaagcta tatatatata 120
 taggagatta ttcgagcgag ctaacgagat gggttccgcc gtcctctttt actgcatctg 180
 catcgccgtc gtcgtcgcat tgtcgtcgtc catggtcgcc gtcagggccg ccgccccggg 240
 ggaaccccc aagttcatct cggcgagcgc ccttgagtgc tccgctaacg taacggtaat 300
 agcaaaggcg cgcaagctga tcgatgtcca tggccacggg ctgtgcccgg tgcggttcga 360
 ccacacgcgc gggatcagcg cgggtggccag c 391

<210> 4582
 <211> 157
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B5

<400> 4582

attcccgggt cgacccacgc gtccagcctg catctgaacc aattgactaa catgcatata 60
 ttatatacta ggtatatgcc cgtgcattgc aacggaaaac acttgtgtat acacagggtca 120
 ttttttagta atgctatcaa gaatcaactc ataaatc 157

<210> 4583
 <211> 317
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-C12

<400> 4583

tatagtgagt cgtattacaa cgagggaggg ggcattgcgcg gggggcatcg tgcaatggcg 60
cggcgggtgcc cgtgcaggct gctgctagcc gtggcggcg cgcccgctgcg cgtggccgct 120
gcagcacacg cgcaggagac gtgctcgggg accgtccccg cgccgcccgcg ccgcgggggcg 180
cgggtgtccg tggccagctt cagcggcccg ggcgatggac ggagcctcgg aacggcggcg 240
tccgcgcgcg ccgtgcccag cattcgagcg ccgggcccgcg ccaggcgggg ggcgagctcg 300
gcgttttttt tttgggt 317

<210> 4584

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-C4

<400> 4584

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cgcagtgaag gcggcgcccg tggccgcgct gctgctggtc gcagcgggtg cgcttgccgc 120
gcgcgcggcg gcggtggcg tggcgggagg ggcgccgctg gtgccggcg gtccgctgga 180
catcgcgag ctgggcgcca agggcgacgg caagtcggac agcaccgccga tgatcctcaa 240
ggcgtggaag aacgcgtgcg agggcgacgg ggtacagaag atcgatcatc cgccgggcaa 300
ctacctgacg ggcgggctgg agctgaaggg cccctgcaag tcctccatca tcatccgtct 360
cgacggcaac ctgctcggca ccggcgacct cagcgcgtac caaaggaact g 411

<210> 4585

<211> 171

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D11

<400> 4585

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agacaccaga catgcacgtc tcgacgcgtg tcatgggaag tttcgggtgg gtggccccgg 120

agctcacgtc aagcggcagg gtcacggagg agtcgtgggt gttctccttc g 171

<210> 4586
 <211> 253
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D12

<400> 4586

tacaacacac tagagtgagt cgtactactg cgcgcacttc tctacacttc tactgcttca 60
 tactctcgta gagagatccc cgcgggcccc taaaaacccg actcgctagc tgcactacac 120
 actcgcagat ggccggcctc aggatgaagt tcgtcgccgt cgccgccatg gccgccgcgc 180
 tcgtggcgtc cgccgcagcc gccgaggccc ccgccccggc ccccgccctcc gacgccgcgg 240
 ccgctctaga gga 253

<210> 4587
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D3

<400> 4587

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 gactgctggg ccgacacccg cgtcatctgc accaagacgc acaactgccg ggacgacact 180
 tgcgcggggc gcggcatgcc ggacggccgc tgccactggg agttccccaa cctggtgccc 240
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 gccggcgatg atggatggtg cccaactgcg actgccagct ctgctccatt cgttggtgtt 360
 taaggcataa tatataaact gccaaattca catgtatttt gggatatttg ttatcatact 420
 atgaaatga 429

<210> 4588
 <211> 424
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-046-Q1-E1-D4

<400> 4588

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caccatcaca tccagccagc caacaaaaat gtcgcgcgtc acagctgcgg tgctcttcta 120
catcctcgcc gttgctgccc tcagcgcggc cgaggccccg gcagagtcac cgaaggaagg 180
cagtgtctgcc aaggcacctg agtctgccaa gagaactgct gcccccgctg aagcacccga 240
agccgcatcc acccccgctc cgcgcgtgc cccatcgccg tcgtctagga agtctgggcc 300
agctaccgcy ccagccaccg cctctacacc cccttcttcc acggacgagg agttgagccc 360
ttccccgcca gcatccaccg ccgcggcgtc ncctgcggct gagggaccgg ctgctgatga 420
ctcg 424
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<210> 4589
 <211> 381
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-046-Q1-E1-E10

<400> 4589

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aggtggaaga gagaagtggg ctggcttctg tccgtcgtc accacatcgt cgagttcgtc 120
gccaagaaac aagtcttggc caacggcacc gaaatggagg tgatgggcac gcagcagaga 180
cgggatctcc aggccaacat tccagcattg cgtaaactgg acacgatgct tctcgactac 240
ctggataact tcaaggaacg caacgagttc tggtacgtga agcgcgactc gtgctcagag 300
agcgagaacg aggagaggtc cgacgagaaa tggtggatcc cgatcgtcaa nggtgcccc 360
ggcgggcttt ccaagaactc t 381
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<210> 4590
 <211> 366
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-046-Q1-E1-E11

<400> 4590

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cattgggttag ggctctcatg ccatagtcta atttggagta ctaaagcatt gcacgaggcc 120

tgcacatcag aatcctgacg caatgagaca cactgattcc tcattccctg tggagggttc 180

agtgtccgca agatcaactt catacgatct tgtaaaggct atctgatcat ccanctgaat 240

ggaaatccgc ttccgatgcc tatgagtatg caactaaggg atcattgcat tatactttca 300

aattctaaac atggtgtcac ctgatcatca ccagcgccag atcactgtca acgggtacag 360

gccaca 366

<210> 4591

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E12

<400> 4591

attacaacac cctatagtga gtcgtactaa gacttgattt agttatggac ggattggttag 60

gcctcttgaa agttcgcgtg gtccggggta tcaaccttgc ctaccgcgac gcaagaggca 120

gcgatccgta tgtcgtccta cggcttggca agaagaaact gaagacaagc gtgaagaaga 180

gatccgtgaa ccccatatgg caagaggagc taactctgac cgtcacagat cccagccaac 240

cactgaagct ggagggtgttc gacaaggaca ccttcagcag agacgacccc atgggagacg 300

cggagggtgga cgtggcgcca ctgatggagg cggtgagcat gaacccgcgg gaggagagtc 360

tgaggaacgg cgccatcatc aggtccgagc ggccgagcgc caggaactgc ctgcgccagc 420

agagccac 428

<210> 4592

<211> 311

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E3

<400> 4592

gggtcgaccc acgcgtccga gcacgcctac ggccttatcc gcgacgtcga caggtagctg 60

cgttcgcac cccccggga tgtacgaaat agcattttct cctaggatcg tatccgccat 120
 agtgctggaa aagacttgcg cttacgcggt cgcctgcact accatcacga ccgtatgaat 180
 aagcatacag gagaaaggat gtatcaattg ggatgttcgc acgatgatct cggccacaag 240
 caacgaggag gaggcgttgt tcagtgtcag ttaatccacc aatgactatg gatatcacat 300
 gacgatggga t 311

<210> 4593
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E6

<400> 4593

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 cagcgagcgg tggccacgat gacgactaat aagccccctc tcctcctcgc cctggcgctc 120
 gcgctccttg gtgcggcgcc ggccgccgag aacgcgcccc gcggggcggt cagcaactgg 180
 gtggcgatga accagcagag ctacgcgctg tacgcgcaga agtccgctcg ggacgggggc 240
 aaggagcccc tggacaagaa gctgtcggag gcggagaaga agaaggtcac gtacgtggtg 300
 gaccccagcg gcaagggcga ctacaccaac atcaccgcgg cgctggagga tatccccgtg 360
 agcaacacca agcgcgtgat cctggatctc aagccccggc ctc 403

<210> 4594
 <211> 153
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E7

<400> 4594

ctagagggtc caaccttact tacccttgca tgcaacttca tgcctcttct atattgtcac 60
 gtaatttcaa ttcaccgacc ttcgttttac aacttccttc cgggaaaaac ccgggggttc 120
 acccaattaa gtcccccttc aagacacccc ccc 153

<210> 4595
 <211> 410

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-E9

 <400> 4595

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 ttcctggaac cagtgaagct gatgagattc acaagatatg caatgtcatc ggtagtccag 120
 atgagcaatc ttggcctcaa ggattgtcac ttgcagaagc aatgaagtat cagttcccac 180
 agatcaaagg cagtcaactg gccgaggtga tgacaacagc cagtagcgat gcaattgatc 240
 tcatctcatc actatgctca tgggataccta gcaagagacc aaaggccgca gaagtcctcc 300
 agcatacctt ttttcagggc tgtacatgtg ttccacttcc tgtccgtcca aaagcttcat 360
 cacttcctag aacacctcca tgtgttggat caaaaggaaa ttcagagaac 410

<210> 4596
 <211> 431
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-F12

 <400> 4596

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 tggcgctcgc cgcgagggt cgggctccgg ccccaccag cggctcctcc gccgtcgcgc 180
 ccgccgtcgg cgccgccctc ggggcccgcg tcgcctcctt ctctgcctac tacattcagt 240
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 tgcgcgcatt ccgatgcgtg ggcattgttt ttgattcgac acaccttttg tctctttttt 360
 ctttgttccc tctttctcct taatttaacg aattgatgca tgccgctgat gttcttcccc 420
 tgagagaggg a 431

<210> 4597
 <211> 100
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-F2

<400> 4597

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gcgtaaccat ggttcgggct aggatcgctc ttgtcattgc 100

<210> 4598

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-F3

<400> 4598

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ggaggctaca gcgggttga ggccggtggc ggaggcggcg gcggcggtta ctccaccccg 180
agcgaggcag cgccatccac gcctgccgct ggggagacga cgacccttc gtcaggcggc 240
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actccttcgt caggcggcgg gggttaccgc ggtgcaaccg gcaaggcttc ctcaggcggc 360
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<210> 4599

<211> 262

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-F7

<400> 4599

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atattaccct tgggcgacca gcttattttg ctggaggccc cagatgaaca aggctaaata 120
tatgatgttt tcgtgtccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagaaaaa 180
aaaaaaaaaa aaaaaaaaaa agaaaacaga aaaaaagaga aaaaaagtga gagattcaaa 240
aacctacaga gacatccaag ca 262

<210> 4600

<211> 408

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-G3

 <400> 4600

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 gtgcgcacgg gttgttttgg cgaccccgag atgaagcggc cagcgcggggt ggcgggctac 180
 aatgcgtacg cgggtgggggg caatgtgaag gcgtccctcc gccggggcct caggtgggttc 240
 aagcgcaaat gctcacgcat cttgaatatc tgaccaccgt gcgagtgcgc gcggcggcgt 300
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 ctgcggtgca ttgccaatat atgcattgat caagaactcg cgtgattg 408

<210> 4601
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-G6

 <400> 4601

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 ctaagcaaag acttgattta gttatggacg gattggtagg cctcttgaaa gttcgcgtgg 180
 tccgggggtat caaccttgcc taccgcgacg caagaggcag cgatccgtat gtcgtcctac 240
 ggcttggcaa gaagaaactg aagacaagcg tgaagaagag atccgtgaac cccatatggc 300
 aagaggagct aactctgacc gtcacagatc ccagccaacc actgaagctg gaggtgttcg 360
 acaaggacac cttcagcaga gacgacccca tgggagacgc ggaagtggac g 411

<210> 4602
 <211> 301
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-G9

 <400> 4602

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tggatatttc tgcttaacgt ggcattagtg gtggatatga atcttactcc atggttgatg 180
gggatgaaac tctcatatgg agtctgcaga ctgcaagtaa tgagggtgag catttgatgg 240
ttgatgttcc caggaagcag ggccagcgtt gccagttttt ttggcacgaa agagtaaagt 300
g 301

<210> 4603
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-H1

<400> 4603

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gagcccgttc cggccatcag caagcggcac ggcggcagcg tcggcggcga ccacgcggcg 180
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cacctccctc tctctggccc cgtgcagctc gcggcgctca ccggcttctc ctggggccaag 300
aagccccggc ccgacgccac gacggcggcg gtaactgtga cgatgcggag cggctccatg 360
gggccaggga ccaacaggaa caacaacagc 390

<210> 4604
<211> 67
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-H11

<400> 4604

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aagggag 67

<210> 4605
<211> 384

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-H8

<400> 4605

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 gcgggaggag agcgtgtaca tggccaagct tgcggagcag gcggagcggc acgaggagat 180
 ggtcgagttc atggagcgcg tcgcgcgcta cgccgggggc gccggcggcg gggaggagct 240
 ctcggtggag gagcgcaacc tgctgtccgt cgcctacaag aacgtcatcg gcgcccgcag 300
 ggcctcgtgg cggatcatct cctccatcga gcagaaggag gaaggccgcg ggaacgagggc 360
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<210> 4606
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A1

<400> 4606

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 ccaactactcc ggtagaaaat ggctgacgct gaggatatcc agcccctcgt ctgcgacaac 180
 ggaactggca tggtaaggc tgggttcgcc ggcgacgacg ctccgagggc cgtcttcccc 240
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 cacggaatcg tcagcaactg ggacgacatg 390

<210> 4607
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A12

<400> 4607

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ttgtacaaca cagtgaagagg tcattccata cctcagatgt aacaagcaag aataaccagt 180
gggagatggt ctcagaaacg atcccaaagt atcgtgatac taaagtcagg acaaaggaac 240
ccctagagca atataaccaa accaaggacg atactgacta cttatggtag accacaagct 300
ttcgcttggg gtcggacgat ttgcccttta gaaatgacat ccggcctgtg cttcagggtca 360
aaagtagtgc acacgcaatg atgggatttg ctaatgatgc ttt 403

<210> 4608

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A4

<400> 4608

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aaagaaaaga aactcgtata gtcgatcgac gaccatgcat cacatttcct tttcctcgat 180
cttctcttat ttccgcagaa aaacaacgaa ggaaacccaa ccaaggaaac gcatgctatt 240
gcttaagcat cgccggagga gctggtcgat cgctcgctca ctcacggggc tgattgttcc 300
ggtcacctgt cgtcgtcgtc gagctgagac acgctcctcc agaagcccgt gccgtagaac 360
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<210> 4609

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A8

<400> 4609

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gcggtacacc gcctccctat cagcctcat cgattcctca ggtctacgtt ttttttggtt 180

ttgtgattta tccaaatttg gaccgcaagc atgactacgg cgaatcatta tcagcacatc 240
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 gataatagga tatgtgctga ctgtggtgca cctgatccca tatgggcatc tactaatatt 360
 ggagtgtttc tttgcttaaa atgtggacat gttcataggg cacttggacc t 411

<210> 4610
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B1

<400> 4610

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 ccaaaatctc agatccttcc tgcccgcccg cccgtgcccc tcgacgcgtc gttcttgccg 180
 gccgcgcctc acctccgccc tctcctcctc cagggggatc ggatacgcca caggctgcgc 240
 gatggtgctg tgggtcttcg gctacggctc cctcatctgg aaccccggtc tcgacttcga 300
 cgacaaaatc ctgggttca tcaagggcta caagcgcacc tttaatctcg cttgcattga 360
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<210> 4611
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B12

<400> 4611

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 ctgaggccgc cgtctccaca cccaacgttg cgcccaggc cactccaatc tccgttgagg 180
 ttgaggctga tgaacaggta gctgagaatg tgggtggtga ggagccggct gctgaggccg 240
 acgttgagca tcagaaggct aatgaggtgc tcgctccaga tgcggccgtc gccgagcccc 300
 accacaagga ggaggaagcc gtggagaaga ccgctcgtcga ggaggagaag ccagcggcag 360

cagcccatgc agacgaaaat gtcgccaccg ccgccgagac cacgac

406

<210> 4612

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B2

<400> 4612

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tgtcgtgct ggtcgccgtg ctagcgggtg ccgccgatgt cgccaacgcc ggccacgcca 120

agccccctgac gcctggcggg cgtgtggtac acgacaacca cggcaagttc acggccgggc 180

cgtggaaacc cgcccacgcg accttctacg gcgggcggga cgggtccggc accacggcgg 240

gcgcgtgcgg gtacaaggac acgcgcacgc acgggtacgg cgtgcagacg gtggccgtga 300

gcacggtgct gttcgggtgac ggcacggcct gcggcgggtg ctacgaggtg ccgtgcgtgg 360

acagccct 368

<210> 4613

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B4

<400> 4613

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gatcacgcgg cgcattgtcg aggtgagcgg gggcagggtc gcgtgcctgc gcgaggcgtg 120

cgaggacgac gacggtgtgc acctcgatc ggagctctgc gagggcggcg agctcttcga 180

ccgcattctc gagcggaagc actactccga gcgcgccgcc gccaaagctcg cccgcacat 240

cgtcgaggtc gtgcagctgt gccacgagaa cggagtgatg cacagggacc tgaagccgga 300

gaacttctg ttcgtgaaca agtcggagga gtcacctctc aaggccatcg acttcggcct 360

ctccgtgttc ttcaag 376

<210> 4614

<211> 368

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-047-Q1-E1-B5
 <400> 4614
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 cgcaagtgct atgcacgcct gcaccccagg gctgttaact gccgcaagaa gaagtgtggc 180
 cacagcaacc agctgagggc aaagaagaag atcaagaact gaagcttgcc aaatcggttc 240
 cttgcatggt ttgcgtcaac aagacgtaca agtttcaaag cttttgtatg ccataggctg 300
 ctgcaacggt ttttaagtcgg aactcatgtg ttctgttca ggtcttcag catgacataa 360
 atcgtttc 368

<210> 4615
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-047-Q1-E1-B8
 <400> 4615
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 gcgccgtggt ggcgctccta gtggcggtcg cggcggtggc cgcgttcctc gcggtgccgg 180
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 gcgcggggcc gcagaagtgc tcgggcgcgg tgggcgagtg cgacgtggac gaggcggagg 300
 agctcgggct gagcggcggc ggctcggct ccgacgacgc ggtgcggcgg acgctggcgc 360
 agcggaagcc gaccaaccgg tacatcagct acgcggcgct gcg 403

<210> 4616
 <211> 278
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-047-Q1-E1-C10
 <400> 4616

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ttttttcatg agggcatggt tcgatatatg gaccactaaa tatacatatc atttactttc 180
ctaaaaaaaa aaaaataaaaa aaaaaaaaaa aaaaaagata agaaaaaaaaat aaaaaaaaca 240
caaacaaaac aaaaaaaaaa taaacagaac acataaat 278

<210> 4617
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C11

<400> 4617

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cagggtcgag tacatgaatt agcagatcgc gaaggagcag caccaggagg cgcgcataga 180
cgatcagatg ctctgtgcgt agggctagga tctctacaac cggcagctta tcaaggatgt 240
ctgcaagggc aactatgatg tcatacactt gctgcatccg cgctccctcg acgagggcaa 300
caagtcattt cggaagacgt agttaccgct acggtgttac aacgtcaaga tcaaccacat 360
atgcagcggc cataccgtca tgatccatga caagctctac gaagcgc 407

<210> 4618
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C12

<400> 4618

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ctccgaacga cgtgggtgcc gtgcgcccga ccggccggtg acggacacgg cagctgctac 120
gagaggagga ggatatatac tagtatatag ctagagcaat tattagctgg tcgtaagcat 180
gaatcgacga ttggacatga tagacaacat cgacggccgt cgggtaacca agaacaaggc 240
gcgcatccaa gttggcgact cctcttcgtc ggacgaaagc gacagggaga aggaggaaga 300

tgaagaagaa gcacatgagg aagtgggtcaa agcgcccccg ctgggttgga atcatcacat 360
 tcaccacgaa gcggccggcg gcattggcag caacagcaac atgacgcggc ttctgtcgaa 420
 gcagctgtcc atga 434

<210> 4619
 <211> 443
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-052-Q1-E1-D3
 <400> 4619

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 gccggccggg cttgtcgtag gtcctccaat ctgttgacgg tcaggccctc tagcttttgc 120
 tcggcgttct ggagacagag cgagagcgag agagagagag agagagagag gtagacggag 180
 atggagtgcc tgctggggct gctcaagggt cgggtgggtgc gaggagtgc cctggccatc 240
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 gtgaaatcaa gtataaaata ccgcacgatt caaccagaat ggaacgagga gctcaacctg 360
 tccatcacga acatgatgaa cccgggtcaag attggactcc tcgaccacga cacgttcacc 420
 aaggacgaca gcatgggcaa cgc 443

<210> 4620
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-052-Q1-E1-D5
 <400> 4620

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 aattagacga cttcttcgtc cctctcttca ttagcacgct aacttgtaat ctgcaggatc 120
 taagcaaaga cttgatttag ttatggacgg attggtaggc ctggtgaaag ttcgcgtggt 180
 ccggggatc aaccttgct accgcgacgc aagaggcagc gatccgatg tcgtcctacg 240
 gcttggaag aagaaactga agacaagcgt gaagaagaga tccgtgaacc ccatatggca 300
 agaggagcta actctgaccg tcacagatcc cagccaacca ctgaagctgg tgagtgcgca 360

gcaggcagaa cgatcctggt tgtgattcat tattctagac tgtttgctac aggaggtggt 420
cgacaaggac a 431

<210> 4621
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D6

<400> 4621

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tattacattc atgctgattc agatgcttga ccttcaagca gctaagccaa cgtcgttggt 180
tgtagcggtt ttcttaaata tactcttaga aaatgatcga gcgttcgaca ttctttactg 240
cataaccttc aaactgatgg atcagaaatg gcttgaaatg cacgccagtt acatggattt 300
caatacggtt attaaatcaa cacggcgcca gctcgagagg gagctgttgc tagaagatat 360
ccagagaatc gaggacatgc catcgtagag gtttctcgcc tgctagcaat t 411

<210> 4622
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D7

<400> 4622

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ggcgccggcg ccggcgccgg ggccgtcgtc cggttgaact gagaagcgtg cgtccagcca 180
agcaagggtg tcaaaaccga gaactaatta agggctcgat tgtgtgtccg gctactactg 240
ttcttgccat aattatatat agatacgcaa agtgtggcca agcctaccca catgcatgct 300
attgcatgcc tccgaatata tattatccga ctcgatcctg ccaaattggt tcgtcgactt 360
cattatatat atcccatccc ttttaatttaa tggagaagtg tgactgctgt tcgtgatggt 420
tttgtatgcg caaa 434

<210> 4623
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D8

<400> 4623

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 cttccttctc ctgctctcca ccgcccgcgc cgtgcggacc atccccgacg aagcccgcgg 180
 ccccggaac aacatccacg aggcgtgcag caagacgtg ttccccaagg tgtgcctgca 240
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 gctgctcgtg tacgtgtcgg ccgaggtggg catgaccgtg gccgcgttcg cgcaccacga 360
 gctcaactcc atcaaggacg acgtcctgta caagtgcctc gacacctgct ccg 413

<210> 4624
 <211> 426
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-052-Q1-E1-D9

<400> 4624

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 ggccgacaag cccacgtact ccacgttcct gaagctcctg caggacacca aggtcgcggg 180
 cgaggcgaat cagctccggt cggcgacgt actggtcgtc cccgacaaac ttgccaagcc 240
 tctggcgtcg ctgcccgcgc ataaggtgcg gccggcggtg gagaaccacg tccttctcag 300
 ttacttcgac cccatcaagc tggacgagat gaagacacgc accgccatcc tccccacgct 360
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 gatgta 426

<210> 4625

<211> 474
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-E1

<400> 4625

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 gccgccgctc ccggcggttg gtttgtcgtc accggccgca tctactgcca caactgccgc 180
 gccgggttcg agacaaacgt gtcccacgcc atccaaggcg cgacggtgga gatggagtgc 240
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 tggtagagga tggagatcag cggcgaccac caggacgaga tctgcgacgt gcgcctgctc 360
 aagagccccg aggcggactg cgccgagatc gaccactccc gcgaccgctg ccgcgtcneg 420
 ctcaaccgca acgacggcat caagcagagc ggcgtccgct acgccaaccc catc 474

<210> 4626
 <211> 454
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-E10

<400> 4626

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 gcaccaagaa gtacgactgc aagatcctc ccaactcgct ggtgatggac ttcgtgaaca 180
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 cggtatggcat ccacatgggc gactcatccg ggatcaccat caccaacacc gtcattggcg 360
 tcggcgacga ctgcatctcc atcgccctg ggacctcaa agtgaacatc actggcgtga 420
 cctgcggccc cggccacggc atcagcatcg gcag 454

<210> 4627
 <211> 445

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-E2

 <400> 4627

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 cgcagaagtc cgtcggggac gggggcaagg agcccctgga caagaagctg tcggaggcgg 240
 agaagaagaa ggtcacgtac gtggtggacc ccagcggcaa ggcgactac accaacaatca 300
 ccgcggcgct ggaggatata ccggtgagca acaccaagcg cgtgatcctg gatctcaagc 360
 ccggcgctca gttccgcgag aagctgttcc tgaacatcag caagccgttc atcacgttcc 420
 ggtcggaccc caagaaaccc gccgt 445

<210> 4628
 <211> 432
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-E4

 <400> 4628

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 tccggcaatg gcaagacaga cagcacgaag gctgtgcang aggcattggc atcggcgctg 240
 ggcggcactg ggaagcagac aatcctcata cccaagggtg acttccttgt cggacaactc 300
 aacttcacag gcccttgcaa gggcgacgtg accatccaag tggatggcaa tctgctggcg 360
 aacacggacc taagccagta canaggacat ggtaattgga tcgagattct acgtgtggat 420
 aacctggatc tc 432

<210> 4629
 <211> 409
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-E5

<400> 4629

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tgttcgtctc ccagatcgtg gtgggcacgc tgatcgcgct ccagttcggc accgccggcg 180
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ggaggtccgg tcggcggggc agagcatcgc cgtgtgcgtc aacatgctgc tcacctcat 360
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<210> 4630

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-E6

<400> 4630

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aggttttcat tggtttgatt gttggagcca tgcttccgta ctggttctct gccatgacca 360
tgaagagtgt tggaagcgct gccctgaaga tggt 394

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<210> 4631

<211> 432

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-052-Q1-E1-E7

<400> 4631

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tgcatacatat ctacatagga ataccgtttg tctgccttac tcaaccaatc aacgctctgg 180
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<210> 4632
<211> 453
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-052-Q1-E1-E8
<400> 4632

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acggagatga agcgcaactg ggggcaagtg tggcagaccg gggaggacct cacctgcgag 180
tcgctgacgt tccgggtgat gaccagcgac caccgcaagg ccacctcatg gcacgttctc 240
cccgtgact ggaagtccgg tgtcacgtac caggcatcca agaacttcta agtagccact 300
tttcctctc ttcttcaacc tgcataatgcc cacaagcaac catgcagatg ataacatgca 360
tcatgcatgc atattcattc tttcgctcat gcattccgat atggtgccgg agttaaaaaa 420
atgtaaataca atgtgcaaac tcaaatgaca tct 453

<210> 4633
<211> 300
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-E9
<400> 4633

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cgagaccgcc gagaagtgcc tcgccgagtt cggcagcgac cgcattctcca tgggcgacgt 120
gctgtggaac ctcgagtacg cgctgcagct gcaggacgcc aacccgcccc agggcgcgcg 180
gcagggcggc gacggggacg accaggacgg cgccgcggcg gccggcgggc gcggcgcngt 240
cgtannecgc ggcggtgccg tgcccacgc gtccgacgcc ggcgccgggg agctcttccc 300

<210> 4634
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-F1

<400> 4634

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tcgccggcga tcgaatttga ccgccggctc gcgagcggag catacgtgca tacatggttt 120
gcctgacgcc ggcggcgggc ggcgtgctgc tcgtcgtcgt cctagcggcg gccgtgtccg 180
cgctcccggc gatcaacgtg acgacgatgg cgttcgagga cgggtacgcg ccgctgttcg 240
ggcacggcaa catcctccgc tccgccgacc accgcaccgt cagcctcctc ctcgaccgtt 300
ccaccgggtc cggtttcatc tcgtcgtcca tgtaccagca cggcttcttc agcggtcca 360
tcaagctccc ctccgactac a 381

<210> 4635
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-F12

<400> 4635

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tgctgcccc accgcggcca agggccccgc aaattcaccg aaggaaggca ttgctgcaaa 120
ggcacctgag tctgcaaaaa aaactgctgc ccccgctgaa gcacccgaag ccgcatccac 180
ccccgtcgcc gccgctgccc catcgccgtc gtctaggaag tctggtccag ctaccgcgcc 240
agccaccgcc tctacacccc cttcttccac ggacgaggag ttgagccctt ccccgccagc 300

atccaccgcc gcggcgctccc ctgcggctga aggaccggct gctgatgact ccgccggtgc 360
tgctgccctt ggaagtggag ctgccatcgc cggcgttgcc gctgctgttg ctaacatg 418

<210> 4636
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-F2

<400> 4636

cggtctagaa ttaccgggtc gagccacgcg tccggctcca cgtccttcgg taggtgcatt 60
gcttcggtgg tccaccatgg cgcagcgagc ggtggccacg atgacgacta ataagcccct 120
cctcctcctc gccctggcgt ccgcgctcct tggcgcggcg ccggccgccg cgaacgcgcc 180
cggcggggcg ttcagcaact ggggtggcgat gaaccagcag agctacgcgc tgtacgcgca 240
gaagtccgtc ggggacgggg gcaaggagcc cctggacaag aagctgtcgg aggcggagaa 300
gaagaaggtc acgtacgtgg tggaccccag cggcaagggc gactacacca acatcaccgc 360
ggcgctggag gatatcccgg tgagcaacac caagcgcg 398

<210> 4637
<211> 445
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-F4

<400> 4637

ggtcaagaat taccgggtcg acccacgcgt ccggctgggt cccatcgacc atggatactg 60
tctgccggag agcttcgagg actgcacttt cgagtggctc tactggcctc agtgccggga 120
gcccttcagc gacgagacgg tggagtacgt gcggctcctg gacgcggagg aggacgtgac 180
tatgctgagg ctccacgggt gggaggtgtc gcgcgagtgc gcgcgcacgc tgcgcgctgc 240
caccatgctg ctgaagaagg gtgtggagag gggcctcacc gccttcaca tcgggagcat 300
catgtgcaga gagaccctga ccaaggagtc cgccatcgaa gagatcgccc gtgaggcggc 360
ggaacgggga ggaggatgcg agactgtctt cttgcaggct gtctcngaga tcatggaccg 420
ccgtctcgac gacatcaaag aacat 445

<210> 4638
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-F5

 <400> 4638

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 cccgctggac ctgatgacac gtcgccgccg ctttcttcca actcgtcgac tccgcctcct 120
 tccgactcat cgacgccgcc acccaattcc tccggctcgg gtcgccgctc gccatcgcg 180
 cccgcacagt cattgtcgcc gccaccaacg gcgtcgccgc aggatagcac ggcgccaccg 240
 gccagaggct cgccggccgc gcagtcgacg gactccccgt catcatcggc tccaaagctc 300
 aacgacagtg actccgataa tagtggtagc agcaggagcg gaagcggaag caggagcaga 360
 tgcagaagca gcgggtcgac gcaggtggat gtcactctgc ccggcggtgtt gattggggtc 420
 ctggccttta gcctgct 437

<210> 4639
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-F6

 <400> 4639

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 gcgccccgcc cctccccac gctggccgca cccgcaatgg ggtgcgcggc gtcggccgcc 120
 aacggggccg ggccccggcg gcgggggtgg gcgcgggcgc ggatgcggcg gtacagcgag 180
 gcgtccacct cgggtctgcc gccgccgccg ccgccgccgc aggaggcggc ggagtcgtcg 240
 tccgggggca ggaggcgagg gcgcaaggtg gcgccggagc ccaaggagcc ggcgaggag 300
 gggaccgccg cgctgccgcc gatgcccgcc tcgccagct tcaggtacta ctgccagaag 360
 aagacggcgg ccgtcgacag gatcgtggcc gacgccgacg ccgccgacgc cgatgactcc 420
 gtcagggtca gagcgac 437

<210> 4640
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-F7

 <400> 4640

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 accacttcgg caaggggctg gtgcagcgga tgccgcgctg ccgtcacggc ttcttccacg 120
 tgggtgaacaa cgactacacg cactgggtca tgtacgcat cggcggcagc cggaacccca 180
 ccatcatcag ccagggcaac cgcttccgcg ccgtcgacga cagcaggttc aaggaggtga 240
 ccaagcggga gtacacgcag tacagcgagt acaagaactg ggtgtggaag tcgcaggacg 300
 acctgttcct caacggcgcc ttcttcaacc agtccggcgg ccagaacgag cgcaagtacg 360
 acaggctcga cctcatccag gccaaagggcg gccagtacgc cgagtcgctc accaggtacg 420
 ccggcgcgct caactgc 437

<210> 4641
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-F8

 <400> 4641

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 cttgggtcaa attccgggtg ccataacacg acctccgccg gcggccaccg gcagccatgt 120
 cgcccttcta cctcgctcgc ggtgcttcca agctagttag aaggattacc tcggagacat 180
 cggtcgagct caagattcta tctgataaat ggcggcttct cctcgctggc ctcatTTTTcc 240
 agtacatata tggtttggcc gctcatgggg ttcatatat gcaccggccg ggccctaccc 300
 ttcaagatct tggcttcatg attcttccgg agcttgggaa agaanagggt tacatcagtg 360
 agacattggt tacattcgt 379

<210> 4642
 <211> 452
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G10

<400> 4642

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atcctcatgg gcatcgccaa caacgacctg ttcgtgttcg ctgccgccga gctgttgccg 180

ggcaggtcgg ccgcgagca gaagagcgac gccgccgct tcctcaccga cctgctgtcc 240

aactactcgg ccgccatcac ggatctgcac tccatcggcg cgaggaagtt cgccatcatc 300

aacgtggggc tgggtggggtg cgtgccggtg gtgcgggtgc tggacgcgga cggcggggtgc 360

gccgaggggc tcaacaagct ggctgaagcc ttcgacgtcg cgctggggcc gtcctcgc 420

ggcctcgccg acaagctgcc gggggctgac ta 452

<210> 4643

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G4

<400> 4643

attaccgggt cgacccacgc gtccacgacg gcgtgctgtc gctggggaac ggcgacatgt 60

ccttcgccgt ccacgccgcc aagcgcttcg ggcagcgctt ctcttctgc ctgctcagcg 120

ccaacagctc ccgcgacgcc tccagctacc tcaccttcgg gcccaaccgg gcggtgatgg 180

gtccgggcac catggagacg gacatcctgt acaacgtgga cgtgaagcct gcatacgggg 240

ccaaggtgac gggcgctctg gtgggcgggg agcggctgga catcccgac gacgtgtggg 300

acgccgagag gtttgtgggc ggcggtgtca tcctagacac gagcacgtct gtgacgtcgc 360

tggtgccgga agcgtacgcg ccggtgactg gcgcgctgga 400

<210> 4644

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G5

<400> 4644

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cttctctttt aaacaacagc gaagtctcac tctagctata tatggagatg aagaagatgg 120

agaaggagga tgacaccatc attgttggtg ccagcatcac tgtcgtaata gggtagtggt 180

agcaaataga tatcacgggc caatgcatgc atgtgtaatg cattgcttgg gatccaaccc 240

aatctagtat agctagcata ggtcggctta aagtattgtc agcactaaag ttaattattt 300

ggcgggtgtag gcggtgttgg ccttccagtt ggcagggatg acatcgtcgt agacggactt 360

ggtgcctccc tcggtagtga ggcggacggt gaggggtccc ttaagcggtt tgtcgctgtc 420

cttcct 426

<210> 4645

<211> 231

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G6

<400> 4645

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cttcgcaaga cgtctcgttg gtccatccat cgactctgag gctgccaacg gctggacatg 120

catgagctgg acagcgagga tcacattagg gttgttgccg ccagtaatag cgccggacac 180

gattgctact gcccacttga aggcagggga catgtcaggt gtattttctg c 231

<210> 4646

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G7

<400> 4646

ccacgcgtcc gccgcccgcc cgccctccc ctctctctgt ctgcgccccc ggggagaagg 60

agggctccgc cgctcccggg gaagagcgcg ccattgccgc cgccgcgctg actggggaag 120

atggttgctc aggagtccac agttgatctc aacaagcccc ttgttttcca ggttggccat 180

cttgagggaac ggtaccagga atgggttcac caaccgatcg tcagcaagga ggggtccacgc 240

tttttcggaa atgatgtcct ggagttcttg actcgcacga agtgggtgggc tgtgccaact 300
 atatggctgc ctgttgtctg ctgcctgctc gtgaaatcta ttctgatggg tcataccggt 360
 caggacgtag ctatgatggc tcggtttggg atatttattt gggcgctgat cgaatacact 420
 ttg 423

<210> 4647
 <211> 413
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-052-Q1-E1-G8
 <400> 4647

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 cgagaccccc gtcaagctcg ccgagtactt caacagcacc gacgggggtgt tccagtaaga 120
 catcatcggc gacgtgccgc cctccatgtc cgcgcccacc aagatggccc ccaacgtcat 180
 ccgcgccgag ttccgcacct tcacgaggt ggtcttcgag aaccccgaga agagcatcga 240
 caccatccac atcgacgggt acgccttctt cgccgtcggc atgggcccgg gcaaattggac 300
 gccagcgtcg cggagcacgt acaacctcct ggacacgggt agccggcaca cgatccaggt 360
 gtaccctatg tcgtggacgg cggatgatgat gacgttcgac aacgcgggca tgt 413

<210> 4648
 <211> 457
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-G9
 <400> 4648

tcaagaattc acgggtcgac ccacgcgtca agaagcccat tgctgcgcgc tttcatcctt 60
 ccgtccaaa caggatgata gtatccaacg aagatatcaa catccttgtg cgtgccaaagg 120
 cgcacatgct cgtcgcgctg aagctcgacc gctgctccgg cttctccact cctccatcg 180
 cactcgtcgc ccgttctcgc aggaaactgg aaacactttt cctggaagaa agcacaattg 240
 atgagaaaga aaatgatgag tggatccgtg agcttgctac gagcaattct gttcttgaga 300
 cactgaattt ctttctaaca gatctcaggg catccccaga gtatcttacc ctcttgtgc 360

gcaactgtca acgattgaaa actctgaaga ttagtgaatg tttcatgcnc gatctgggtca 420
gtttgttccg aactgcacaa acactacaag agttcgc 457

<210> 4649
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-H1

<400> 4649

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cgtgctagcg gtggccgccc atgtcgccaa cgccggccac gccaagcccc taacgcctgg 120
cgggcgcgtg gtacacgaca accacggcaa gttcacggcc gggccgtgga aacccgcccc 180
cgcaaccttc tacggcgggc gtgacgggtc cggcaccacg gcgggcgcgt gcgggtacaa 240
ggacacgcgc acgcaggggt acggcgtgca gacggtggcc gtgagcactg tgctgttcgg 300
tgacggcgcg gcctgcggag ggtgctacga ggtgcggtgc gtggacagcc ctagcgggtg 360
caagcccgcg gcggcagcgc tgggtggtgac ggtgaccgac ctgtgcccgc ccaagggaca 420
atggtgcaag ccacgc 436

<210> 4650
<211> 434
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-H12

<400> 4650

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atgggacacg agagtagcgg tggcggcgcc gacgaagagg accccgcccg cctccagcgg 120
gtcatttggg tgccgcagat gctccaccgc tggcagtcct ccagctccag gattgccgcc 180
gagaggaggt ccagcgccag cgacgacggc gacagagcca acccagacga cgccaacgcc 240
acgacagacc aaagcagcaa cggcgacccc acgcctgccg ctgcagacaa tgccagcagc 300
agcagcagca gcaggaacca gatgctgccg gcggcgcccgc atggtgcggc ggacgaagag 360

gacgangacg angaccggcg gctcctgtcg cgggtgctgc tgggtgganga gcgcaggcng 420
gggtgcccc ccga 434

<210> 4651
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-H2

<400> 4651

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agcatcatca caataatggc ccgcgcgtgc gtgttctctg tgggtgctcct cctggccgcc 120
gtcgcggtgg cgccgtttgc gggggctgcg cgtgtggacg tcgtggaggg cagggtccatg 180
gcgtccgccg acgcgcctga agcggcggtc gacgcgccc ctcccgggtcc cgactccgcc 240
tcatccccgg actcctcgtc ggaggcgccc tccagcagca gtcctccga ctagccgcgc 300
acaacgcagt tcttgtcatg atctatctat cacataaaaa gatcatatgt ctcgtttgat 360
tctctggaat aactaatagt atatatgctg cgcccggatg atatataaat atgtgc 416

<210> 4652
<211> 439
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-H3

<400> 4652

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gaaggcgcg ggcgtggccg cgctgctgct ggtcgcagcg gtgtcgctg ccgcgcgcgc 120
ggcggcggtg gcggtggcgg gagggcgccc gtcggtgccg gcgggtccgc tggacatcgc 180
gcagctgggc gccaaaggcg acggcaagtc ggacagcacc ccgatgatcc tcaaggcgtg 240
gaagaacgcg tgcgaggcga cgggggtaca gaagatcgtc atcncgccgg gcaactacct 300
gacggcggg ctggagctga agggcccctg caagtctcc atcatcatcc gtctcgacgg 360
caacctgtc ggcaccggcg acctcagcgc gtaccagagg aactggatcc agatcgagaa 420
cgtcgagaac ctgtccatc 439

<210> 4653
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-H5

 <400> 4653

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 tctctctcgc tcggcttccc cggttcttga gaggggaaag aggaggcgga ggagagggat 120
 ggggagggac gagaggttcc cagtgtggga ggccgcgctc ggcgctgggg tcgccgccgc 180
 cttcgccgct gggctcgtcg gggtttacct ttccatgccg gactccgact acagcttctc 240
 caagctgcca cgtaatctcc aggaactcga aatcctcact ggccatcttg agaactatac 300
 taccgactac accctacagg tggttggtacg ctactgcgcc gtgtacatct tcatgcagac 360
 cttcatgatc ccaggaacga tattcatgtc actgcttgct ggtgccctgt ttg 413

<210> 4654
 <211> 427
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-H6

 <400> 4654

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 gccggcgcac gtgcggcggg ggctcacgct caccaccgag cccaaccaa ttaataatat 120
 atatatatag ctaggatcga tcgtcagtaa aatggcaggc tccgccgtcc tgaggagccc 180
 cctgtccgtc ctctctaca tctcggccgc cgtgcccgcc accgccggcg cgacgccgac 240
 cgacgccgcc atcgacgagg cgtacgcgca tctcgtcaac ctcaccgcta accaggagta 300
 ctggggcgag cgcgcgagg cgggcgacgc gtacaaccgc gcggcgtagg agaccgaccc 360
 cgtggccgtc gtgcagcgct tcaacgacgg cgtgcacagg gcgacggcga cccggtcgcy 420
 gtccctg 427

<210> 4655
 <211> 251

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-H7

 <400> 4655

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 tcggatcaag tgaatatgta cctacatgtt gtgttcttaa ttctgcattg tacagctata 180
 cactatacaa ggggtacggga atgctgaggt gtaacttcca tgcaatatac ttagttctat 240
 tcatctaaaa a 251

<210> 4656
 <211> 295
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-H8

 <400> 4656

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 cagtttaagt tcgcgttgta cttgtatgta tagtggctgc tacttatgtg agttttgtac 120
 ctgtactgta catgaagtct cttttctttt atataccatg gctaaggggg tgttgactaa 180
 gggcctgttt gtttacctcc cagattatat aatctggatt aaataatcct aagaggcaaa 240
 caaacagtct agcttatttg cccagattat ataatctaac cccttggatt atgat 295

<210> 4657
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-H9

 <400> 4657

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 ctccgccgcc ggccgcccgc ateagggggc ggtgcagcgc gctcagcttc gcggcggcgc 120
 gggaccgctg cttcagccac cgcttccgca gggcggggct gcgcccgcgc gccgtgccgc 180
 tccttgcccc gggcccaggc cccgacgccg acccggccac caccgtccac atgtgggtgc 240

actttatgaa acaa

434

<210> 4660

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A12

<400> 4660

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gctgctggtc gccgtgctag cgggtggccgc cgatgtcgcc aacgccggcc acgccaagcc 120

cctgacgcct ggccgggccc tggtacacca caaccacggc aagttcacgg ccggggccgtg 180

gaaacccgcc caccgcacct tctacggcgg gcgggacggg tccggcacca cggcgggccc 240

gtgcgggtac aaggacacgc gcgcgcaggg gtatggcgtg cagacggtgg ccgtgagcac 300

ggtgctgttc ggtgacggcg cggcctgcgg cgggtgctac gaggtgcgct gcgtggacag 360

ccctagcggg tgcaagccca gcgcggcgac actggtggtg acggcgaccg acctgtgccc 420

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<210> 4661

<211> 378

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-A2

<400> 4661

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tgataccacc accgtagcac cacacgcacg tacgaagaag gcgacgaaca tggcgaggct 120

gggcttggtg ncggccgtgg ttctgtgcct cctgttagcg acagggccgc atggggccat 180

cagcgcggag gggatggtgt catttgacaa tttgatcagc tgcaaggtac tgggcaactg 240

cgacaagaac ctgagccccg aggcctcccc cccaaggaaa accgccaacg actacacccg 300

cggctgcaac ccgattaccg gctgtcgcgg ctgatcatat ctctctgggc gatgtgcgcg 360

caatgtcaat gtcgcacg 378

<210> 4662
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-053-Q1-E1-A4

 <400> 4662

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 acagtcacag ccagaccgct ggcgtaagcg taaggagaga tggatcgacg aggcacatcc 180
 agggatcatc tcgtggaggc cttccgccgt cgtctcagcc atcgtcagtg aggcgccagc 240
 agcgcggttc cgagcccgcc gctgccgacg agagcgagaa gacgacactg gcggagccgg 300
 tagtgaacca gctggccagg gagttccaga cggggagggg ggcgttcgag cacaacgcgc 360
 gcgcggtggc ggaggccagc aggctgccga cgtcgtcgtc cactcctggc aacgcca 417

<210> 4663
 <211> 354
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-053-Q1-E1-A6

 <400> 4663

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 tcgaaacaag tgtagccggg gtatacgca tcggcgacgt ggccaccttc cctctgaagc 180
 tctacaacga gcagaggaga gttgagcacg tggaccacgc ccggaagtcc gccgagcagg 240
 ccgtgagggc aatcaaggcc aaggagtccg gcgaatcggg ggccgaatac gactacctgc 300
 cctacttcta ctcccgtcg ttcgacttgg cgtggcagtt ctacggcgac aacg 354

<210> 4664
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-053-Q1-E1-A7

 <400> 4664

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 cggcaccttg ttctcaagg ccggcgctc ggcaggctcg gcgccaattc caaaaaagcg 180
 gcccgcgcca accggccccg tcttgaacg gcctatgaag gacttgcgca gcatctacac 240
 tgtcggcaag gagctcgggc gtggccattt cggcgtcacc agcctgtgca cacacagggc 300
 taccggagag cgcttcgcgt gcaacactat tgccaaccgg aagctctcca ccaaggagga 360
 cgtggaggac gtgcggcgcg aggttcagat catgt 395

<210> 4665
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-053-Q1-E1-A8

<400> 4665
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 gccgtcctcg tcgccgcctc ggccaccgtg gcgctggccg cggaggcgcc ggctccgtct 180
 cccaccagcg gtcctccgc ggtcgcaccc gccatcgteg gggccgccgt ggctccttc 240
 ttcggtact acattcactg agccgccgga cgaggagccg gagccggagg gaagagacca 300
 aggtgggggg agagacttgg ctgcgctgcg ctgctctgct gctcccgcgc attcccgatg 360
 cgtgggcgtg ctctgattgg gcacggcggt ggcagtggca caccttcgtc ttcctttggt 420
 ttgttttttt ccct 434

<210> 4666
 <211> 446
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-B2

<400> 4666
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ggaagcaaga ggctgctaga gatcgagctc atcaaccaac caagtcgtac gtcgtcagca 180
tcacgaccgg atggcgctg cgcgtccag ctatgtatcc aggagggggc tctccgcagc 240
gatgacggtg gccgaggagt ccgtgaagaa ggtggaggac aaagcngtga agctgggaac 300
tgtggccaag gacatcgcca ggcgatggc caccacgacg gaggagaaga cggcggttctg 360
ggaacctgac cccgagaccg gatactaccg ttccggtcac ggcacgaagg aggtggacgc 420
cgccgaactg cgcgccgaga tgctca 446

<210> 4667
<211> 134
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B3

<400> 4667

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gtgtacctcg tgatccgcat cgacatcggg catcggctca gcgtaggctc caacgtgttc 120
ccctccaaca cgct 134

<210> 4668
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G12

<400> 4668

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agtgtctctg actctttcct gcagggcgga tatactcgca agcgttccac cttgcagggc 120
agggtttctt cctctcggct cactgtaaca tggagcagca aagcgcgttc tactgtctcg 180
ggctcttcct gtggatgcaa gagaatggct ccacgagtgt gacagtggac tacgagttcg 240
ctgcaaggac gagaccatcc ggcgagtttg tgagcaagta caagggtaac tacacattca 300
ccggtggaag ggctgttgga tacatgaatc tctttgcaat cccatggcag aagttcttgg 360
ccgatgacag cctcttcttc gtggatggga tgctgcatct gagagccgag cttacgataa 420

agcaaccct

429

<210> 4669

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G2

<400> 4669

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ccccacggag ggaaggatgg cggagcccaa agcggcggcg gcggcgagga agacgcgggt 120
gggcccgtac gaggtcggca agaccatcgg cgagggcagc ttcgccaagg tcaagcacgc 180
gcgcgactcc cgcaccggcg ccgtccgcgc catcaagggtg ctcgaccgca accacgtcct 240
ccgccacagg atggtcgagc agatcaagcg ggagatttcg actatgaagc tgatcaaaca 300
tcccaatgtg gtacagctgc atgaggttat ggcgagcaaa acgaagatat acatggttct 360
tgaatttggt gatgg 375

<210> 4670

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G3

<400> 4670

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agtgttgagc ttataactg caatggttgt tatggacaca tggcagtact tcatgcacag 120
atacatgcac attaacaagt ttctgtataa acacatccat tctaagcacc atactcttgt 180
agtcccttat tcctttggag ctctatacaa ccacccctctt gagggcctta ttttggacac 240
cattggtggt gcactctcat tcctcgtctc tggatgact ccacggacat ccatattctt 300
tttctccttt gcaaccatca aaactgtgga tgatcattgt gggctgtggc ttcttggtta 360
taccctccag gcgctgttca gcaataacag tgcttatcat gaacatcaca atcagctcta 420
tggaac 427

<210> 4671

<211> 408
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-059-Q1-E1-G5

 <400> 4671

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 ccacatcagc catggggcgcc tgcgcaacca agcccaagac gcttgagggg caggccccag 120
 ctgaggccgc cgtctccaca cccaagggtg cgcccagggc cactccaatc tccgttgagg 180
 ttgcggctga tgaacaggta gctgagaagg tgggtgtgga ggagccggct gcggcgggccg 240
 acgttgagca tcagaaggct aatgaggtgc tcgctccaga ggcgcccgct gccgagccccg 300
 accacaagga ggaggaagcc gtggagaaga ccgtcgtcga ggaggagaag ccagcggcag 360
 cagcccatgc agaggaaaag gtcgccaccg ccgccgagaa cacgacga 408

<210> 4672
 <211> 431
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-059-Q1-E1-G8

 <400> 4672

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 ccagcttget cgccgcgccc gtccttcttc ctgcctccg ttccattccg tcccgccctc 120
 caccgccgcc gccgcattca gggatggaga tgaagaagat cgctgcgcc gtcctcgtcg 180
 ccgcctcggc ggccaccgtg gcgctcgccg cgagggtcc ggctccggcc cccaccagcg 240
 gtcctccgc cgtcgcgccc gccgtcggcg ccgccctcgg ggccgcgctc gcctccttct 300
 tcgcctacta cattcagtga gccggccggg gcgcccggag gccgacgaag agacgaaggg 360
 gagagagagt gacatggctg ctgcattcc gatgcgttgg ccaggttttt ggatccgaca 420
 caccttttgt c 431

<210> 4673
 <211> 392
 <212> DNA
 <213> Zea mays

1. The first group of people who are not in the majority are those who are not in the majority.

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gcctggtgaa	cgcgatgatg	gacctgcagg	agggggcgct	gatgctgctg	ggccccacga	120
tgaacgcaa	ggtggcgttc	gagctgtcgg	agcggtcgcc	gcacctgccg	ctgcgggatgc	180
aggagcactc	gcgccgcgcg	ctggcgttcg	ccgagcggat	gcaggggctg	ggcctgcgcg	240
tgctgtacct	gggcctcccg	ggccaccgcg	accacgcgcg	cctggccgcc	atgggcaacc	300
cgggctacgg	ctgcggcggc	atgctgtgcc	tcgacatggg	caccgaggag	cgcgccaacc	360
gcctcatgca	ccacctccag	aacaccaccc	ag			392

<223> Clone ID: LIB148-059-Q1-E1-H1

<210>	4675
<211>	417
<212>	DNA
<213>	Zea mays

<400> 4675

2034

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acaaggacca tggtaattgg a 381

<210> 4678
<211> 425
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-H5

<400> 4678

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ggtcaacacc aagatcaagc tggagccggt catggcgccg tcgtcgtccc tgccgcggag 120
cgccagcgag ctacccgacc cgccgtcacc gttcagctcc aacacggcgc accaccccg 180
ctccgtgccc accacaccta ggttgctctt atcgtgctcg tcgttcggcc acatggtgac 240
cccgccacc gacacaccgc cgatcacgcc caccaagaag caggacgaca agccgaagcc 300
gacgccggag gccgccaccg cggcgaacta cgcgtcggtg tggtcgcca agcgctcat 360
gcagcgcgct gcccgcgctt tccgccgcag caggttcccc gcccgcgctc ggacgggtcaa 420
ggacc 425

<210> 4679
<211> 412
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-H6

<400> 4679

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tgtgttcttc gccgtggcct caccggcggc tctggccgcc ttcgatgtga tagagatgct 120
ggccgacaag cccacgtact ccacgttcct gaagctcctg caggacacca aggtcgcggg 180
cgaggcgaat cagctccggt cggcgacgct actggtcgtc cccgacaaac ttgccaagcc 240
tctggcgctg ctgcccgcgc ataaggtgcg gccggcggtg gagaaccacg tccttctcag 300
ttacttcgac cccatcaagc tggacgagat gaagacacgc accgccatcc tccccacgct 360

gctctccgtc ancgacaaga aactcggcgt cctcaactac accagggccg ac

412

<210> 4680

<211> 416

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-059-Q1-E1-H7

<400> 4680

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atgacgacac tgccctgggggt gactacgcc aagcaactct tagatgcac cctgcggatt 120

acagcgggtga aggcagcgat ggcggagatg aagctagaca atgcaataaa atcaggcagt 180

gctcagggta acccgatgat gtcgtcgcta aagacatgca aggagagcta cgcgtcgctg 240

gtagactcca tcaataccac gcggaacacg ctcaaaagcg gcggcagcaa tgcagacctc 300

atgtcggagc tatccgcggc ggacaccttc gccaccgact gcggggacac cttcgacgag 360

cgaacagacc tcaactcacc catacccggt gcacagcgcc acgtcanacc gtcacat 416

<210> 4681

<211> 416

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-059-Q1-E1-H8

<400> 4681

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aaccccgggc gtggcgggcg ttgggttctt tctcccgacc ttctgggaga tcgaggtcac 180

gtgcgcggcc gcgatgatcc tcgtggcgct ttacgttgcc tacgagctcc tcaacccgcg 240

ctcctcgacg gcggcagcgg cgggacgacg cgacgagctc ctcgtgcggg ggctggacgg 300

cgccgacaag ttcaaggggg gtgtgagccg cccctctgcc tatgtantga agctcgaatt 360

gttggtgca caaaatttga tggcggcgaa cttaaattggg acatctgacc catatg 416

<210> 4682
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-H9

<400> 4682

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tcgagggcca gccaaagctt gccatggcgg ccgtccggtc cgacagggtc caccaccacc 120
accgccgtc cgaggcgtcg tgtccggcaa cctccgcggc cgtggcggcg gcgagggccg 180
atgacgccct gcgccagcgc ccgcgggggc tcgtgcaggt ccgggagcgg gaccagggcc 240
cgctgtcgac ggggcaccag cacctgcacc accatcagca ccagctgcgg cggtcggcgg 300
cgttcccacc ccgccgcccg gggccggggc gccgccctcc tcagcgtgc gaaagcgacc 360
tcaacatcag ggagcacgcg tcctgcagcg aggtggccgg cggcaccgcg gcgggctgcg 420
ccgctgtgtg ctgctgcttc cc 442

<210> 4683
<211> 440
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-A10

<400> 4683

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cttctgcac gtgcatggtg agaaggaaga gtcaaaggc atcgatgcga aagcgtccgg 120
gcctggtggg tccttcgaca tcaccaagtt gggcgccctc ggcaatggca agacagacag 180
cacgaaggct gtgcangagg catgggcac gccgtgcgcc ggcaatggga agcagacaat 240
cctcatacc aagggcgact tccttgtcgg acaactcaac ttacaggcc cttgcaaggg 300
cgacgtgacc atccagggtg atggcaatct gctggcgacc acggacctaa gccagtacaa 360
ggaccatggt aattggatcg agattctacg cgtggataac ctggtcatca ccggcaaggg 420
aaaccttgac gggcaaggcc 440

<210> 4684

<211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-060-Q1-E1-A12

 <400> 4684

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 acgtcaaaga gtttgagcat ctggactggg ctgcgaggat gagggtcac atgggcgtcg 120
 catactgcct tcaatacatg caccatgagc tcagtccacc tatggcgatc cagcagctgc 180
 ggtctgacac aaccttcatt tcagatgatt atgctgccaa gattgcagat gttggtgtat 240
 ggaacgagct tgctgccaaa gcgaaggctg gaaaggagga cggcagcagc cgtgctgaag 300
 ctctccgga tctcccaagc aacgcctact gcttcggcgc gctcatgac gagaccatat 360
 ccgggagggg tcttgacccg tatgatcaca aacctatg cagctgggct tctgagcatc 420
 tgaaagac 428

<210> 4685
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-A2

 <400> 4685

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 tcggggatgg ccgtgagcga cgagtgaag ctcaagttcc aggagctcaa gtcgaagcga 180
 agcttccggt tcatcacgtt caagatcaac gagcagacgc agcaggtggt ggtggacagg 240
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 cgctacgccg tcttcgattt cgacttcacc accgacgaga actgccagaa gagcaagatc 360
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<210> 4686
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-A4

<400> 4686

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atagcatggg cgcgtcgggc aacatcccca tcttcaagga tggctctgggt tgtgggtcct 120
gcttcgagat caagtgcgat aagcctgtgg agtgctccgg caagcccggtg gtgggtgcaca 180
taacggacat gaactatgag cctatcgcg cgtaccactt cgatttagca agcacggcgt 240
tcggcgccat ggccaagaag ggcgaggagg agaagctgcg caaggcgggc atcatcgaca 300
tgcagttccg aagggttaag tgcaagtacg actccaaggt caccttcac cttgaaaagg 360
ggtgcgcccc caactacctg nactgttgg tcaagtacgt cgacggcgac ggtgacattg 420
tggcagtggg cg 432

<210> 4687
<211> 450
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-A6

<400> 4687

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tttatgtttg tgttccaata tgggtgttagt ggtgccgcca tcgctcatgt tatatcacia 180
tatttcattg catccatact cttatggaga ttaaggttgc atgttgattt gttgccacct 240
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gttattgccg caacttgttg tgtgacacta tccgcttcaa tggccgcacg gctaggttca 360
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gatggattgg cttttgctgg acaaatgcat 450

<210> 4688
<211> 390
<212> DNA
<213> Zea mays

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tctgcgccac catcgggcag cctccctcca ccgtgcacac ggcttctcc tcgctccagg 180
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aggaggagtt gaacctgcag ctaggtggcg ggcagggccca gtctgaagct caccgcccg 360
ccgtcatcgt cgacgtcgac ggctccgacc tgacgacgac caagctcgac gagctccgag 420
cctatctgca gca 433

<210> 4691
<211> 438
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-B11
<400> 4691

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ggcgccggcc gccgcgaacg cgcgcggcgg ggcgttcagc aactgggtgg cgatgaacca 180
gcagagctac gcgctgtacg cgcagaagtc cgtcggggac gggggcaagg agcccctgga 240
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gggcgactac accaacaatca ccgcggcgct ggaggatata ccggtgagca acaccaagcg 360
cgtgatcctg gatctcaagc ccggcgctca gttccgcgag aagctgttcc tgaacatcag 420
caagccgttc atcacgtt 438

<210> 4692
<211> 217
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-B12
<400> 4692

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gtagaattta tttggtttgg cgctggcgat ggggtcggga gttgtcgcgt gggctagttg 120
 ggccgcgggtt ggtgattcgg cccactattc ctcccaaacc ctagccgccc tccctcctca 180
 cccctcccc tttgtgcagc cgcccccca cttcccc 217

<210> 4693
 <211> 428
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-B2

<400> 4693
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 gtggtggaca ggcttggggg accaggtgaa agctacgatg cgttcagggc ctgctttcnc 120
 gccaacgagt gccgctacgc ggtgtttgat tttgactttg tctactgatga gaactgccag 180
 aagagcaaga tctttcttcat ctcttggggc ccagatgcat cgaggggtgag aagcaagatg 240
 ttgtacgcaa gctccaagga ccggttcaag agggagctcg acggcattca agtggagcta 300
 caagcaactg agccgagcga aatgagcatg gacatcatca agtcgcgagc cctctgaaac 360
 agcccggcat cagctcctgc atgccgctcg attccttcgg tgttggtaac ggtcatccgt 420
 tttcgtgt 428

<210> 4694
 <211> 74
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B3

<400> 4694
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 gccgctctag agga 74

<210> 4695
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B4

<400> 4695

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cgcaactgga ctctctttcc tgcaccaagc gaagccagaa ccacttgtcc accgggacct 120

gaagcccgcc aacatectcc tgcaccacaa ctctgtcagc aagatcagcg acgtcgggct 180

cgcgaggctg gtgccacagt ccgcgggccga cgtcacgcag tacaggatga catcgacggc 240

cggcaccttc tgctacatcg acccgaggta ccaacagact ggcatgtctc ccaccaagtc 300

cgacgtgtac tcgctcggca tcatgtgtct ccagatcatc acggcgagggt cgcccatggg 360

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<210> 4696

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B5

<400> 4696

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ttccgactcc tcgccatgct cctctccctc gacctgccc cccgcggcac cgctgccgcc 180

gccctcgacg ccgagtactt cacgacggca ccgtacgcag gcgacccccg gagcctgccc 240

aagtacgcgc ccaacaagga gatggacgcc aagttccggg aagaatctag aaggaggagc 300

aacctccgga gccaaaggcg cgagggggcg aagcggctgt cctggggggca caagagcatg 360

cagctgcagg acacgaacca gagccacgtg cacgccgagg aatcgctgcc cgttgtggcc 420

aaaag 425

<210> 4697

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B6

<400> 4697

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 cggagcggga ggcgcacggc gtcgcgcagg ccaccgggtc gctggtgcac gaggccgccg 360
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 tgtacatac 429

<210> 4698
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B7

<400> 4698

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 gagagcctca aggcggggga tcatatctac tcctggaggg cggcgtgggt ctacgcgcat 180
 cacggaatat atgtgggcga tgataagggtg atccatttca caagaggaag aggacaggag 240
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 acgccttgcc cgggtgtgcac cgacgaaacc agcgacagca gcacagagac gaacggcgtg 360
 gtatcctcct gtctcagctg cttcctagct gggggtgctc tctaccgttt cgag 414

<210> 4699
 <211> 393
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B8

<400> 4699

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 cttcttcggc tggctggggc acaagctcgg gcgcaagaag gtctatggca tgacgctcat 180

gctcatggtc ctctgttccg tgcggtcggg gctctcgttc ggccacaccc cggcgtccgt 240
catggcgacg ctgtgcttct tccgcttctg gctcgggttc ggcatcggcg gcgactaccc 300
gctgtcggcg accatcatgt ccgagtacgc caacaagaag acgcgcggcg cgttcatcgc 360
cgcggtgttc gcgatgcagg gcttcggcat cat 393

<210> 4700
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B9

<400> 4700

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tgaccccaag aagtaccgca agatgaagga gaggttctg ggcgtctctg aggagaccac 180
cacgggtgtc aagaggctct accagatgca ggagaccggc gccctcctct tccctgccat 240
taacgtcaac gattccgtca ccaagagcaa gtttgacaac ctgtatggtt gccgccactc 300
actccctgat ggtctgatga gggccaccga cgttatgatc gccggtaagg ttgccgtggt 360
ctgcggatac ggtgatgttg gcaagggttg tgccgctgca ctcaagcaag ctggtgccccg 420
tgtcattgtg accgag 436

<210> 4701
<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C10

<400> 4701

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acgcatttag agggccggga tcgtcctgga gattcgtcgg cacaatcaga tacgccgaat 180
cctaaaacgg tccaggattt ttgagttgga aactgtggga aatgcgggat atgatggtga 240
gcagatattt gcaaatgtat ccttggaag atgtttcgga agatttcatt gcaatggggt 300

ttcaaaattc tccgtttatt attctatggt tgtagctgt taaccgttgc ctagtgtcta 360
 cgtattgtca aaccttctta cagtagaagt caacgctatg caccaagcag attaaattag 420
 tggacagtag tcaaattattg tgag 444

<210> 4702
 <211> 413
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-C11
 <400> 4702

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 cttcaacccg gttgagaagc gcacggccat cacctacatc gacggcaacg gcgactggca 120
 cagggtcagc aagggcgccc ccgagcagat catcgagctg tgccggatga gcaaggatgc 180
 cgagaagaag atccacgccc tcatcgacgg ctacgccgac cgcggcctcc gctccctggg 240
 cgtgtcgtac cagctgggtcc ccgagaagag caaggagagc gccggcgagc cgtggcagtt 300
 catcggtctc ctcccgtgt tgcacccgcc gcggcacgac agcgcggaga ccatccgccg 360
 cgcgctccac ctgngcgtga acgtgaagat gatcaccggc gaccagctgg cca 413

<210> 4703
 <211> 384
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-C12
 <400> 4703

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 ctactgaag gccagttgg aggcagcana gtacgatgtc atcaagtact gcataggtac 120
 cattgtttcg atctcagccg tcggcctcgc cgtcctccgc atcgtgatgt gaaggcagca 180
 aagcaaatac gttctttggg ttaccata ttcgtcgcgc gtccgtggaa acccgcaaga 240
 agagaatagg ttctaattct gttcctagtt tttaaagggg acaaaacgtg ctcaggggag 300
 ggggacactt ggtagtaggg agatgttgct caaacttgta aaaatagatt gcccgaggaa 360

gaaatgcatc cgaaatgatt cttt

384

<210> 4704

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C2

<400> 4704

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cgccggggccc ccttccaacc gttggcgccc attttcccaa agccggggcaa gccaaacccc 120

tgaagccttg ccggcctttt gtacaagaaa accaagggaa gttcaacggc gggccgttga 180

aaaccgccc aagcagcttc tacggcgggc gggaccggtc cggcaccacg gcgggcgcgt 240

gcgggtacaa ggacacgcgc acgcaggggt acggcgtgca gacggtggcc gtgagcacgg 300

tgctgttcgg tgacggcacg gcctgcggcg ggtgctacga agtgcggtgc gtggacagcc 360

ctagcgggtg caagcccgac gcggcggcac tggtggtgac ggtgaccgac ctgtgcccgc 420

cc 422

<210> 4705

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C3

<400> 4705

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acctgccggt ggtggacaac ggcgaggtgg tggccatgct ggacatcgcc aagtgcctct 180

acgacgccat ctcccgatg gagagggcgt ccgagaaggg gaaggcggcg atcgccaacg 240

tcgcggttgg cgacgacaag tactccatcg tcgaagctct caaggagcaa atgttcaggc 300

cctgcttgtc tgccattgtc ggcgaagact caacggtcgt catggtgtcg cctgggtgatt 360

cggtccttgc agcgaccaag aggatggtgg aagcgcacgc g 401

<210>	4706
<211>	428
<212>	DNA
<213>	Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C4

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agggatccgg	gatggccacc	ttcgtgcacc	gcaagtacag	cgacaaggag	gacagcgaca	180
tattcaagtg	ctacgacagc	tgctccgacg	acgtggagga	ggccgtcgcc	cacctcaacg	240
gcctcgtcgg	ggagcccacc	gacgccaagt	tcctcgagct	caagtcgtgg	ctctcctcca	300
cgctcggcgg	cacctccacc	tgcgaggacg	cctgcaagga	cctgcccgaag	accagcgaca	360
aggacgacgt	cgtcaacttc	agcctcgact	tcgagaagct	gcagcgcgtc	acgctcgacc	420
tcatcacc						428

<223> Clone ID: LIB148-060-Q1-E1-C5

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catcgcgcgg ctgctggacg cctccttccg gcgccgcttc gccgcggcgg gcctcgtcga	120
ggcctccgtc ccgctggacg gcggcgcgac cacggtgcac tgctggcgct tcccgccgag	180
cgccgacgac ggcggcggcg aggaagcccc ccccgtcctg gtgctcctgc acggctttgg	240
gcccccgcg acgtggcagt ggcggcgcca ggtgggcccc ctctcgcgcc ggttcgggct	300
catcgtcccc gacctgctct tcttcggcgg ctcgctccac tcgtcggcgc ccggcgtctc	360
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<223> Clone ID: LIB148-060-Q1-E1-C6

<400> 4708

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ccatcatcga gttctcggcg caggcggcggc tggagaagct cgtcctcggc gccacgacga 180
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gcgcccgcgc gcgggtgtcg ccgctccggt cgcagatcca gtcgtcgcag attgccgcaa 360
cgctcaagcc cgagccgccc cagtcgcacc ggtggtcctc gtcgtcgaga ggccacgagc 420
a 421

<210> 4709

<211> 107

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C7

<400> 4709

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tttttttttt tttttttttt taaatcgagg gcggccgctc tagagga 107

<210> 4710

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C8

<400> 4710

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tattttttcac gaaattgacg gagcatgtct ctctacgtgc cctgtacgca ctcatggcat 120
ggtcgtcatg gcttttccat ttcaatccta gcctgaacag tgagtgaagt aagcattgat 180
tgtctccacc agcgaatcaa tgtacgcgga acaggggagt tttatctcag caagtgcattg 240
gcgcagctctg cggcgtcaat gcaatagtagc tgaggcttct gtttgcgcg gttcattgaa 300

tccttgtttg ccgaaatggc gactgcgccg gccccggctg cacttgccat ttgccaaagca 360
gcaatcaggt tcacatgaat ggagcggacc cccatttgaa tccttctagg cacatcaatc 420
attcgctccc 430

<210> 4711
<211> 439
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-C9
<400> 4711

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ccggcgcccc gccctcccc cacgctggcc gcacccgcaa tggggtgcgc ggcgtcggcc 120
gccaacgggg ccgggccccg gcggcggggg tgggcgcggg cgcggatgcg gcggtacagc 180
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tcgtccgggg gcaggaggcg agggcgcaag gtggcgccgg agcccaagga gccggcggag 300
gaggggaccg ccgcgctgcc gccgatgcc ggctcgcca gcttcaggta ctactgccag 360
aagaagacgg cggccgtcga caggatcgtg gccgacgccg acgccgccga cgccgatgac 420
tccgtcaggg tcagagcga 439

<210> 4712
<211> 431
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-D10
<400> 4712

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tgctgtcgt gctggtcgcc gtgctagcgg tggccgccga tgctcgccaa gccggccacg 120
ccaagccct aacgcctggc gggcgcgctg tacacgacaa ccacggcaag ttcacggccg 180
ggccgtggaa acccgccac gcaaccttct acggcgggcg tgacgggtcc ggcaccacgg 240
cgggcgcgtg cgggtacaag gacacgcgca cgcaggggta cggcgtgcag acggtggccg 300
tgagcactgt gctgttcggt gacggcgccg cctgcggagg gtgctacgag gtgcgggtgcg 360

tggacagccc tagcgggtgc aagccccgacg cggcagcgct ggtgggtgacg gtgaccgacc 420
tgtgcccgcc c 431

<210> 4713
<211> 422
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-D11

<400> 4713

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acaatattgt tcgccgtacg cggcgtagcc gcggcagcct tacgggtacc ctgctccgcc 180
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angcggtgcg gtcgggggga tgatgctcgg agaggcgatc ggtgactatg agaccgacgc 360
cgcttatgat gccgggttca acgatgcatt ggcattttag attcaggttg tcgtgcagtc 420
at 422

<210> 4714
<211> 410
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-D12

<400> 4714

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ccagctgaag cggcagctgg gcgagatggc ccaggaccgg tgcgacttcg ccgaggagga 300
ggagtcgagg gtggaggccg gcctcatcca cctgcgctcg ctgcagaagc gcaccggcag 360

ctacttccgc tacacggggt ccctcacgt gccgccatgc accgagaacg

410

<210> 4715

<211> 426

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-D2

<400> 4715

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gccgctgccg tcttccccgt caccaaccac gacggcccggt gctgctcctc cgaccacggc 180

agcaaggaga agaagaagaa aaagaagggc gccaggaagg gcaggaaacg cgcctccatc 240

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ctcgggcgcg gcgagttcgg cgtcacgagg cgggtgcgagg acgccgccac gggggaggcc 360

ctggcggtgca agacgatccg gcggaagcgg ctgctcctgc gcctcgccgg gcncgacgcg 420

accgac 426

<210> 4716

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-D3

<400> 4716

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gaggcacgac cacgttatgc tgttcggggc cagcgacgcc gcgtccaagg acagggagat 120

gcaggtcacc gtcgccttca accacttcgg caaggggctg gtgcagcgga tgccgcgctg 180

ccgtcacggc ttcttccacg tggatgaaca cgactacacg cactgggtca tgtacgccat 240

cggcggcagc cggaacccca ccatcatcag ccagggaac cgcttccgcg ccgtcgacga 300

cagcaggttc aaggaggatga ccaagcggga gtacacgcag tacagcgagt acaagaactg 360

gggtgtggaag tcgcaggacg acctgttcct caacggcgcc ttcttcaacc agtccggcgg 420

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458

<210> 4717

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C8

<400> 4717

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acggcacgta cacgatcgag ctcaaggaca gccacgagga ggacatctgc gaggtggtct 360
tggtggagag cccgcgcaag gactgcgacc aggtgcaggc ggacagggac cgcgccggcg 420
tcctgcctca ca 432

<210> 4718

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D2

<400> 4718

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ggatgggtggc gctggccctg gtggtcctcc tggtggcggc gacggcgttg gtgcccacgg 180
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catatacaat cgctgctccg tcgctcacgt cagcccatgc ataatctctc gacccgggcc 420
attgaatc 428

<210> 4719
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-D3

 <400> 4719

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 ttcgaagaat cgggaactcg aaatccana ccaggccct gacatggctg cgcgcctcca 360
 ctctactcgc gttcctggca ccttttggt acatgcacca gaatatgcca tgactggaca 420
 gct 423

<210> 4720
 <211> 325
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-D4

 <400> 4720

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 tgttcgtgct gaaacggaga cgccggttat tgcggtttca attagaagga ttccaagggt 120
 tccttcaaac atgcctttgt atgaaatacc caatgagttt cagaaaggaa ttagccaaat 180
 ggctgctggt gtaaaggcta aacctaaaaa ctgaaccacc gcctgacaga actgaaccaa 240
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<210> 4721
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D6

<400> 4721

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ccacgacggc gccgtttggg cccagagcac cgcattccca cagttcaagc cagaggagat 180
gaccaacatc attaaggact tcgacgagcc tgggtttctg gccccgatcg gcctcttctt 240
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gggatctgga ggcataactg tgaagaagac cggacaggcg ctggtgatcg gcatctacga 360
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<210> 4722

<211> 244

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D7

<400> 4722

aggtaccggt ctagaattcc cgggccgacc cacgcgtccg aatcaccaaa ggaaaacaca 60
agagtactct tggaggaaag tttagcattc aatttaaaaa accttaccaa ctcatgcctt 120
atttgaatgc aataatgcat gttctgttgc catgctgttg cttggacaca tgcttggcat 180
ggctattttc tggttatgtc acaactcata tctcccatgt aaatttatgg ctatgatatg 240
catc 244

<210> 4723

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D9

<400> 4723

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gccacgcaa gcccctaacg cctggcgggc gcgtggtaca cgacaaccac ggcaagttca 120
cggccggggc gtggaaaccc gccacgcaa ccttctacgg cgggcgtgac ggggccggca 180

ccacggcggg cgcgtgcggg tacaaggaca cgcgcacgca ggggtacggc gtgcagacgg 240
 tggccgtgag cactgtgctg ttcggtgacg gcgcggcctg cggaggggtgc tacgaggtgc 300
 ggtgcgtgga cagccctagc ggggtgcaagc ccgacgcggc agcgtctggtg gtgacgggtga 360
 ccgacctgtg cccgcccgaag gaccagtggg gcaagccacc gcgggagcac ttcgacctca 420
 gcatg 425

<210> 4724
 <211> 364
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-E10

<400> 4724

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 cgacggcggg caccttctgc tacatcgacc cggagtacaa gcagacgggg aagctggggc 120
 tcaagtgcga catctactcg ctccggcgtg tctgtctgca ggtggtcacc gcgcggccac 180
 ccatggggct cagcaccac gtcgagaagg ccatcgacgc gggcaccttc gcgcagatgc 240
 tcgacatcac cgtcaaggac tggcccgtcg aggaggcgtc cggctacgca aagctcgcg 300
 tcaagtgcac ggagatgcgg cggagggacc gggccggact cgcaaccgtc gtactgccgg 360
 agct 364

<210> 4725
 <211> 288
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-E4

<400> 4725

gggtcgacgc acgcgtccag ccgggacaaa accgccgtc ctctctctcc gcccctcccc 60
 gctctttctg tgaggcggga agcaggcgg atgccgaggc gacggggctc gcgcaccgca 120
 cgcgtgtgcc cgcgccccg gggccaggcg aggtggtgag gtgaggccga gcgcggtttt 180
 aaattgttca cccggccgcc cttctcgccg tagttttcag tggtaacagc aagggaggaa 240
 cgaacgtgag ggctgcctgc ctgcctgcgg acatgggctc cacctcaa 288

<210> 4726
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-E6

 <400> 4726

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 cggcaagggc gtggggccgcc ccgcgggcgt gtcctcaaac ggcaagggcg gcaaggacct 120
 ggaggccgcg cctgccttca ccttcgaggc cggcaagacg taccgcctcc gcgtctgcaa 180
 caccggtatc aaggcgctgc tcaacttccg catccagggc cactacatga agctggtcga 240
 gctggatggc tcccacaccc tgcagaacac gtacgactcg ctcgacgtcc acgtcggcca 300
 ctgcctctcc gtgctcgtcg acgccgacca gaagcccggc gactactaca tgggtggcctc 360
 cacgcgggtc atccacgacg ccaagtccgc gtccgccgtc atccgctacg ccgggtccag 420
 cgccccgccg gcgccggaac atga 444

<210> 4727
 <211> 125
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-E7

 <400> 4727

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 aaaaatcatt gtaatgggag ttatatatat aactttatct caccatztat ttacaccaac 120
 aagtc 125

<210> 4728
 <211> 387
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F1

 <400> 4728

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caattctcca acttctctccc tccgtcgatc atccagcacc agcaggagaa tcccgtcgaa 120
 tccccctctc aaccaagggc ggcgcgcggt gcgtatgcct cctccagatc caaagcaaca 180
 gacagcgagg gggcaccggg gtccgccgca tgtttgcat ttatggagga tcatgctttc 240
 ttgcttacta cattagctcc tgacgcgcg cctcccctc gcgttcattg atttcggtta 300
 taattactac cgagctacta tctccacatt attattggta aagaaagaaa gggcgccctc 360
 tcaaatttga tgggcattcc gtttcct 387

<210> 4729
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-F2

<400> 4729

ggtcgacgca cgcgtccgac cacacgtccg cagaggtggt gcccaggaat acagcttgga 60
 agccggcaaa aatttgtgat tttggtgctt ctactgtcat ttgttggtat gcttgccctt 120
 gccatcctca tatgggttgg tagaggagac aatcctatcg attcttctct actgaaaagg 180
 gtttatttgg atgtattttc agtagtagtt attgtacttg gtggtgctct ggcattgtac 240
 ggtgcagtgt tattctcgaa gatgagcaaa gttcgttctg aaactgtatc aactgagaag 300
 tggaagggtg ccagtttagc tgctgtctcg ctgatctgtt tctcgtcttc tgctatactt 360
 gcacttgtga ctaatgttcc agtgcttttg tattgggtact caacagatgt ggacatcatc 420
 a 421

<210> 4730
 <211> 180
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-F3

<400> 4730

tcagaagaca acgcaaaagc aggattactg gatctggtgg aaataagggt tgaaggagat 60
 cacatatacc agttgcatgc ttgacaaact tcgtcaacta gcaagccctc tggcattgtc 120
 ctttgctctg gaagtaaaat ttactattcc aatagaatac atgacttaga cataaaagaa 180

<210> 4731
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-F4

<400> 4731

 attcacgggt cgaccacgc gtccaagctt gtcctcgcg ccatcaattg caagaggagc 60
 aagataccac caccgtagca ccacacgcag gtacgaagaa ggcgacgaac atggcgaggc 120
 tggccttggg agcggcggtg gttctgtgcc tctgttagc gacagggccg cagggggcca 180
 tcagcgccga ggggatggtg tcatttgaca atttgatcag ctgcaaggta ctgggcaact 240
 gcgacaagaa cctgggcccc gaggcctccc gccagggaa acccgccaac gactacaccc 300
 gcggctgcaa cccgatcacc ggctgtcgcg gctgatcata tctctctggt cgatgtgcgc 360
 gcaatgtcaa tgtcgcacgc gcgtgcaggt accaggcctc agcgtgtggt gccgcgtgtg 420
 tgtanatatt acacacatgc 440

<210> 4732
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F5

<400> 4732

 ggtaacggtc tagaattccc gggccgaccc acgcgtcaag gtgccacaac ctctcctgct 60
 gtcgctgctg gtcgccgtgc tagcgggtggc cgccgatgtc gccaacgccg gccacgcaa 120
 gccctaacy cctggcgggc gcgtggtaca cgacaaccac ggcaagttca cggccggggc 180
 gtggaaaccc gccacgcaa ccttctacgg cgggcgtgac ggggccggca ccacggcggg 240
 cgcgtgcggg tacaaggaca cgcgcacgca ggggtacggc gtgcagacgg tggccgtgag 300
 cactgtgctg ttcggtgacg gcgcggcctg cgagggtgc tacgaagtgc ggtgcgtgga 360
 cagccctagc ggggtgcaagc ccgacgcggc agcgtggtg gtgaacgtga ccgacc 416

<210> 4733

<211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F6

 <400> 4733

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 gtgggcgaag agaccccagc cagtcgatcg ttcaagaaaa ataccagctt accaacaaca 120
 gcagcagcaa gcccacccgt tcgacgacat ggcccgcctc ggcgccggcg ccgtgttggc 180
 gctcctagtg gcggtcgcg cggtggccgc gttcctcgcg gtgccggcct cggcgaagtc 240
 cggggagctg agcgcgatgg ggttgctggc ggcaagggc ggagcgggcg cgggcccga 300
 gaagtgctcg ggcgcggtgg gcgagtgcga cgtggacgag gcggaggagc tcgggctgag 360

<210> 4734
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F7

 <400> 4734

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 gagtaccagc agacgggcat gctcggcgtc aagtccgacg tctactcctt cggcgatcatg 120
 ctgctgcaga tcatcacggc gaagccgccc atggggctgt cgcaccacgt cggacgcgcc 180
 ctggagcgcg gcgagctgca ggacatgctg gaccccgccg tgcccgactg gcccctggag 240
 gaggcgcagt gcctcgccga gatggcgctc cggtgctgcg agctgcgccg caaggaccgg 300
 ccggacctcg gcgccgtcgt gctcccggag ctcaaccggc tgcgcgcgct cggcgaggac 360
 aacatgcagt actgcggcgc catcatcagg ggtggc 396

<210> 4735
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F8

 <400> 4735

ccacgcgtcc gggcggtcac gatcacctgg gtgaaggcga ggcagatctt cgacagccgc 60
 ggcaacccca ccgtcgaggt ggacgtgggc ctacgcgacg gcagctacgc gagggggggcc 120
 gtacccagcg gcgcattccac tggaatatat gaggccttgg agttgaggga tggaggatct 180
 gattatcttg gcaaggggtgt tcttaaggct gtcagcaacg taaacaacat tattggacca 240
 gcgattgttg gaaaggaccc cactgagcag gttgagattg acaacttcat ggtccaacag 300
 cttgatggaa cctccaatga gtggggctgg tgcaaacaga agcttggagc aaatgccat 359

<210> 4736
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-F9
 <400> 4736

ccacgcgtcc acaagcattt gtatcgtaat gttgggcgtc atcagtgtg ccctggggac 60
 atactcctcc gtgaaaaaga ttgtagaaaa ctactaagct cttcgacaat aattgcctgc 120
 ctgcaccaga ctccacgtat ggaactcgaa atgttgaggc atctatatat acggcgacga 180
 ctactgtaca atcagagtac accttatgta cagtcaggat cagctagcac tatattctta 240
 gaacttggtc gagtgcagcg aggatgcatg ttcgttggcc ttttatgggtg ccaccatggt 300
 cgaagccata gcctgagcat gataatggcg ccatgcactg ttgtcttgta tcatatgcgc 360
 tgttctatct caagttcntt ttgaaggaag caagcttgat ttgtttgt 408

<210> 4737
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-G10
 <400> 4737

gacccacgcg tccacggacg cgtgggttca gaaggggtgcg gtgcaagtac cccgctgggc 60
 agaagatcgt gttccacatc gagaagggtc gcaaccccaa ctacctggcc gtgctgggtga 120
 agtttgtggc ggacgatggc gacatcgtgc tgatggaaat ccaggacaag ttgtcggctg 180

agtgggaagcc catgaagctc tcttggggcg ccatctggag gatggacact gccaaaggcgc 240
 tcaagggccc cttctctatc cgcctcacca gcgagtcgag caagaaggtc atcgctaaag 300
 acatcatcnc ggccaactgg agacncgatg ccgtctacac ttccaacgtc caattctact 360
 agactttgaa ttgccttcga ttcacccggc gcggcgggct atggacctgc agcagcaagc 420
 taattaaagg 430

<210> 4738
 <211> 331
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G11

<400> 4738

aattcctagt cgaccacgc gtccaatccg cttgcggcat gtatgtaatc gttctgatct 60
 tacaccgaaa ttgcattcgt gtcagagacg actctacca atatggatca ggaagaaatg 120
 tatcagtgat cgcacgata aacacagttt gtctgaactc taaacttctc tgtgacacca 180
 ttctattctt caacaaacta aactcccttc actaatttta ggatgtactc gcatcaatct 240
 gttatatatt ctcagaaata ttaggctgtg tacacctcac gatagagatg cacagggtgg 300
 agtgtatatt atattaaaaa gttctttgtc t 331

<210> 4739
 <211> 280
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-003-Q1-E1-G2

<400> 4739

gacgcacgag tccacaacaa acannnatca aacgagtggg caaaactgaa aacggcaaatt 60
 tggaaaaccc aaatttcgag gtccaacaca aggaccaggc taacacattt caggatcccc 120
 acaattacag tggcttcaac aactctggag accaagcacg cttcaacaca agtaaagaat 180
 cacttccgat gcaattcttc cacaggcaat ccaattttta agtttgagca acatctccct 240
 actaccaagt gtcccctccc cctgagcaca gtttgcctcc 280

<210> 4740
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G5

<400> 4740

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 cgacctcctg cccttgtaca acgcacgcac ggtccccgtc ccaatggccc agactctgtc 120
 cgccgcctcg gagctggcca ccctgaagcg cccgttcggc aacgacgggt tcggcgatgg 180
 cagcaacaac ggcagcgcga cgggcgagaa gcccaaggcg cggcggcggg aggcggaccc 240
 ggcggcggcg atggccgcgg cgccgcacga gtccggcgag cacggcggcg tgaacatgtc 300
 catcgaggcg tcggcgacgt tcacggtgat ggagccggac acgatgcggc ggctgttcgc 360
 gggcgagctg ggccccgacc gcggagacat gtacatctac agccg 405

<210> 4741
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G6

<400> 4741

cggtcaggaa ttcccgggcc gaccacgcg tccggtacag ggatgctgca atgatcgaaa 60
 ttggcatgct tgagaagctt ggtaaatatg gtgaaagcag atccagttgt gttcaaattc 120
 ggaactggtt tgactatcgt aaccatatct gtattgtctt tgagaggctt ggaccaagct 180
 tatatgattt tctgaggaaa aacaattacc gtcattccc aattgcccta gttcgggagt 240
 ttgcaaaca actgttgga tgtatagcat ttatgcatga attgcgcctc atacacactg 300
 atttaaagcc tgagaacatt ctcttggtt ctccggagta cattaaagtg cctgattaca 360
 aagtctcatc ccaatcccca aaggaggggt cctattacaa gcagttgccc aagtctagtg 420
 ctatcaaggt gattgatttc ggtagcacta ctt 453

<210> 4742
 <211> 213
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G7

<400> 4742

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gcacagtcac gggtaccact agtccagtct cgttcaaatt catcactgct tgccactact 120
catgcgccca tccgtaaatgt ccttggttagg cttggggcgac acttatagca ttttcacagg 180
ccacacgcct accgctcagt cgcagttggc cca 213

<210> 4743

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-003-Q1-E1-G8

<400> 4743

cccggggccga cccacgcgtc caccacgcg tccgaacacg gccggcgcg agcggcacca 60
ggcgggtggcg ctccgggtgc agggggacac cgcggcgttc tacaactgcc gggtcgacgc 120
gttccaggac acgctgtacg tgcacgcgcg gcggcagttc ttccgcaact gcgtggtctc 180
cggcaccatc gacttcacat tccggcaactc ggcggcgggtg ttccagaact gcctcatcat 240
cacgcggcgcg cccatggaca accagcagaa ctccgtgacg gcgcacgggc gcaccgaccc 300
caacatgaag tccgggctcg tcatccagaa ctgccgcctg gtgcccgcacc agaagctgtt 360
cccggaccgc ttcaagattc cctcgtacct gngcccgcgc tggaaggagt tctcgcgcct 420
cgtcatcat 429

<210> 4744

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H1

<400> 4744

ggtcgacgca cgcgtccgca accgtgtgcc ttttggagac gcgatgtcgt ccggcaacaa 60
gatcagcgtg gccttgctga gcgtggccct agtgggcctg ctctctgcc acctcgccac 120

caccgcctcc gccaccaga aagacatcca cgtcctcggc agcgtcgacg gctccagcga 180
 cggcagcagc cccgagtccg aaggccgcgt cgtctacgcg gacatgaagc tggctgatac 240
 ggaatccgat gcgcgggcgc cggcgccggc gccggggccg tcgtccgggt gaactgagaa 300
 gcgtgcgtcc agccaagcaa ggtgggtcaaa accgagaact aattaagggc tcgattgtgt 360
 gtccggctac tactgttctt gccataatta tatatagata cgcaaa 406

<210> 4745
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H2

<400> 4745

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 tcacgtctgt caactccaag ttcttccaca tgaacatgta ccggtgcaag gacatgctga 120
 tcaaggacgt gaccgtgacg gcgcccgggg acagcccca cacggatggc atccacatgg 180
 gcgactcatc cgggatcacg atcaccaaca ccgtcattgg cgtcggtgac gactgcatct 240
 ccatcgggcc cgggacctcc aagggtgaaca tcaccggcgt gacctgcggc cctggccacg 300
 gcatcagcat cggcagccta gggcggtaca aggacgagaa ggacgtcacg gacatcaacg 360
 tcaaggattg cactcttaag aagacgatgt tcggcgtccg catcaaggcg ta 412

<210> 4746
 <211> 393
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H3

<400> 4746

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 cggcacagaa cgtgaacccc agactgaggc gtcacagat ggaaatagag aggtccctgc 120
 accagatctg gttcttcttc tttgtgtttg tgctgctgtg cctgctcttg ttctgagacg 180
 gaggactgtt ctatatgcct ctttgtagat attgaagagg gggagagagg gataactaatg 240
 gatgatgcgt atagtagaca gggtaatggt ctgtatcgac aagcatgtgt ctaaagcatg 300

ctgatataga gttgtaatat gatgagacat gggaggtgaa atgtatattt cattcttctc 360
gtcataacgt cagcgggtttc ctgatcaaaa aga 393

<210> 4747
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H4

<400> 4747

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ctcctctcgg aggtctgata ggcaacccaa taatggcaga agtcctatca ggatctcatg 120
aacaccgtct aagctctgcc ttagatggac actacgacga gaagaggaaa tccaatgtgg 180
aatacacaga ggacgagaag aaagccgtga tcgcggtctt gaaaaagaag gctttgagcg 240
cctcacagaa gtttaggcat tccatgaaga gggggaggaa gagcagcaag gtgatgttca 300
tctcgattct ggatgagcgt gaacctgagg aggtgcaggc tgtggatgcc ttccgccagc 360
ttcttgact tgaagagctg ctaccatcgc agcatgatga ctaccacatg atgctaag 418

<210> 4748
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H5

<400> 4748

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ctccgaccac cgtacgtcct ccaccgcgtc gccgccggcc ggctctgcc cagcccgggc 120
tgctgcgag ggcttctgat ggccctcgac gccgtccttt cctcctagt cccagcttta 180
ttgcagatcc agccctctga tctcgtctt ctttcacctc tccaacatga aggtcaacac 240
caagatcaag ctggagccgg tcatggcgcc gtcgtcgtcc ctgccgcgga gcgccagcga 300
gtacccgac ccgccgtcac cgttcagctc caacacggcg caccaccccg tctccgtgcc 360
caccacacct aggttgctct tctcgtgctc gtcgttcggc cacatggtga ccccgcccaa 420
cgacac 426

<210> 4749
 <211> 466
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A10

<400> 4749

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 acgccttgcc cgggtgtgcac cgacgaaacc agcgacagca gcacagagac gaacggcggtg 120
 gtatcctcct gtctcagctg cttcctagct ggggggtgctc tctaccgttt cgagtacgca 180
 gtcaaccocgg cgctcttcct cgccaaagcg cgaggaggga cgtgcacgct cgctccctct 240
 gaccctgacg acacgggtggc tcgccgcgcc agatacctgc tgagcaacgg tttcaggtgc 300
 tacaacctgt tcaagagcaa ctgcgaggac ttcgcgatat actgcaagac tggccttctt 360
 gtcgctgagc agggcgttgt cgggcagagc gggcaggcta tctccatcat cgggtggacct 420
 ctccgccgcyg tgggtctcgac cccattccgc ttgggttaca cgaaca 466

<210> 4750
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A11

<400> 4750

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 ccggcgacga tcgaggaggg aggaacgcca gagaccggc ggccggcgac atgggtccgc 120
 gcagctcacc ggccggcgac tgctgtgccc tcgctctcgc cgcggccacg ctggcgctgg 180
 cccacggggc gcaaggagga ggaccatcgg catcgccggc ggacctggac aagggtcacgg 240
 ccgagacctt cctcgacacc gagatcgacg gcaagcctgc aggccggatc gtgctgggac 300
 tgtttgggga caccgttcct aaaacagcag agaacttccg agcactttgc acaggggaga 360
 aaggaatggc caagtccggc aagcctctat ggtacaaagg gtcgacgttc cacaggatca 420
 tcccgggggt catg 434

<210> 4751

<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A12

<400> 4751

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gatccgggtca ctggccggggg agggctcaga aacctttcat ccaatacata catctatctg 120
agccctttcc cgcggtgagg cccgaccgga gtccacacac acacggtgtc gatggcggcc 180
gtaataagga gccgccgccg cgtgtccgtt ttcttctacg tcgtcctcgc cgcagctgca 240
gctgcagccg cggcgcatgc atccaataac gtcacctccg acgaggagta ctgggcggag 300
cgcgccgagg tggctcgggtc gcgcaacctc gccgcctacg tcagcgaccc cgtggccgcc 360
acgaaccgct tcaacgcgga cgtgctgagg gccacgacgc tgcgggcgct ggcgatgta 419

<210> 4752
<211> 466
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-004-Q1-E1-A2

<400> 4752

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cttctcgcgc ggcaccgtcg agctcggctg tggaaacaga acaaaccat caaccatggc 120
gaactcggcg tcgggggatgg ccgtgagcga cgagtgaag ctcaagttcc aggagctcaa 180
gtcgaagcga agcttccggt tcatcacgtt caagatcaac gagcagacgc agcaggtggt 240
ggtggacagg ctggggcagc cgggcgacac ctacgacgac ttcaccggct ccatgccccga 300
gagcgagtgc cgctacgccg tcttcgactt cgacttcacc accgacgaga actgccagaa 360
gagcaagatc ttgttcatct cctgggtccc ggacacctcg agggtcagga gcaagatgct 420
gtacgcgagc tccaaggacc ggttcaagag ggagctggag ggcatac 466

<210> 4753
<211> 93
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-A4

<400> 4753

aattccaggg tcgaccacg cgtccgaaaa anaaaaanaa aaaaaaaaaa aaaaaaaaaat 60
aaaaaggaag ggcggtcgct ctagaggatc cat 93

<210> 4754
<211> 474
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A6

<400> 4754

ggtctagaat tcccgggccg acccacgcgt ccacatagca tcaatcatgt ctggtcgttc 60
gtggacaata atggcgccctc tcctggcgctc gatgctgctc gtcgggctcg cctgtgggctc 120
cgaggaggag gaggacggcg gcgggcaaaaa gaagccccac gtcaaccacg gcaagtttaa 180
ggcggagccg tggacggacg ggcacgcgac gtactacggc gggcgcgacg ggtaactga 240
caccacggac ggcggcgcggt gcggtctacaa gggcgagctg gggaaagact acggcaccct 300
gacggcgggc gtggggccgt cgctgtacac caacggcacc ggggtgcggcg cgtgctatga 360
gctcaagggc cccaagggca ccgtggtggt gacggccacc aacgaggccc cgccgccggt 420
gagcgggcag aagggcgagc acttcgacct caccataccg gcgttcctca agat 474

<210> 4755
<211> 444
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-A7

<400> 4755

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accctctgct tgtgaagaca aggctcaggc actgggctca agtagtggct tgttcagtga 120
agcactcgag ctgacccctg tcagtgtttt attcacgctc ttcttccata cataataccc 180
gtacaagtgg ttgcgatggc gatgaattag tcgtgtccga gtgaaactag atcaattgac 240

cttgttgctc gatctaattgt cgtcccaggt cacattgttg tggacagatt taattagcgt 300
 cgggttgga aattaaaaaa tgtatatgca aagtactgtt aaagggtggc atggtgtaaa 360
 aggtgtgagc tatctcccta aatcattatg tcacagattt gaaacagtct ttccgtatct 420
 gcganaaaaa acttgtctcg tttt 444

<210> 4756
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-B11

<400> 4756

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 agaaacgcga gcaaccagcg atcgccccat ggccgcatg gctcgttcg tctccctcgt 120
 cgtggcgccc cttctcctcc tctccctcct cgtctccgcc gcggccagt gcgggaccgt 180
 gggcgacacc gtgcaggacg cgtgcagcaa gaccagttc cccaagatct gcgtggacag 240
 cctcgccgcc aagccggaga gccagaaggc gacgccgcgc aagctggcgg agctgttcgt 300
 gaacatcgcg gccgagaagg gatccgggat ggccaccttc gtgcaccgca agtacagcga 360
 caaggaggac agcgacatat tcaagtgcta cgacagctgc tccgacgacg 410

<210> 4757
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-B12

<400> 4757

gaccacgcg tccacactaa tccaagacaa aacatggctg tgaatgtgag aaccatgtgg 60
 tcgtcgatgc gggcacatgt tgcgatggct gtggcggttg tgttcttggt gagcggcgca 120
 tgggtcggtc ctcccaaagt cgtcccaggc aagaggatca cggccaccta tggcaaggac 180
 tggttggacg ctaaagcgac atggtatggc aagccgacgg gtgccggtcc cgacgacaac 240
 ggtggcggct gcgggtacaa ggacgtgaac aagccccct tcaagagcat gggcgcatgc 300
 ggcaacatcg ccatcttcaa ggatggtctg ggttgtgggt cctgcttcga gatcaagtgc 360

gataagcctg tggagtgtctc cggcaagccc gtggtggtgc acatcacgga ca

412

<210> 4758

<211> 473

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-004-Q1-E1-B2

<400> 4758

attctagggt cgacccacgc gtccagaaag gactactccg aggcgccctc cgcctccgcg 60

aggcacgact ccgttcggcg gcgacctcaa cttcggcccc agcacgcgct tctcctccat 120

ggacttcggc gacaacctcg acctcaccgc cagccncgct cgggagccca tgtcaccggc 180

caccggcgcg caacgggata ttgaggtcga gatgcggcg ctcgggtgg aactcaagca 240

gaccatggac atgtacaacg cggcgtgcaa ggaggccatc aacgccaagc agcgggccaa 300

ggagatgcag ctgatgaaac tggaggagga gcgtcggctg gaggaggcca ggcacgccga 360

ggagactgct ctggcactgg ccgagatgga gaaggccaag tgccgcgcgg ccatggaggc 420

agccgaggcg gcgcagagac tggccgacct gnaggcgag cggcgccgca acg 473

<210> 4759

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-B9

<400> 4759

ttcccgggcc gacaaacgcg tccagcagag cagggttgtt gactggaaca tggatgaagaa 60

aggggaggat gaggaggaga agaagctgaa tgcaacatac ataatcagtg ttgctaggaa 120

gctaggttgc actgtcttct tgctacctga agacataatg gaggtgaacc caaagatgat 180

cctcaccctg acagcaagca tcatgtactg gagcctgcag aatcaagggc catacaagag 240

ttcaggacca caggatgtct ttctagagga agaggaaggc gaggaggagg aagaagaaga 300

agaagaggag gaagaggagg aggaggattt cgaaggaggt gtcgaagatg gtgtctctga 360

aacgaccact tgataagaat tgtcacgctt gactagccat tgccggtaaa gtcactggtc 420

tattaagggc atata

435

<210> 4760

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C10

<400> 4760

ggcttagact tcccgggtcg acccacgcgt ccatggccat cgtcgtgtcc gcgtcgttca 60

aggccagggtt cccagccccg gcctacgcg tcgacccgc cgggtccacg ccgccgcagg 120

ccgacttcgt gtggcggatc atcctgatgc tgggcgcgat gccgcggcg ctcacctact 180

actggcgcac caagatgccc gagacggcgc ggtacacggc gctggttgcc aagaacgcca 240

agcaggccgc ggctgacatg tccaaggtgc tgcagggtga gatctcagcc ggcgccgccg 300

aggaggacgc cgtggctgcg actgcgactg cgcctgcgcc ggcgtcggcg tcggcgtcct 360

ttgggtcttt ctccggggag ttcttcgcc ggcacgggct gcacctctg ggcacgtcct 420

cgacgtgg 428

<210> 4761

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C11

<400> 4761

tcccgggccg acccacgcgt ccacgacccc accgggccac cgttccttgc caactgccaa 60

gcatcaccgc gaaatctaata aactcgttgc tcttcgtctt cgctccgcga tcgatccagg 120

agggggaagc agaaggaggg atggcggaga accgcagct gtttgggaat gggatgccgg 180

tgccgttcta cagtgagatg ttcgtcctcg cccgggatgg cgtcgagtgc cacgtcgaca 240

agatcccatc agtccttggg ggtcatgtga aaacaaaagg cacaatttac ctgtctaata 300

taaggatggg gtttgttgcc aacaagcatg ttggcaactt ctttgctttt gatatgccac 360

tggtgtttgt gcacggtcag aagttcaatc agccaatatt tcaactgcaac aacatctctg 420

gattcgttga gccagttggt ccagacaaac 450

<210> 4762
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C12

<400> 4762

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ccccggcaag gtctcgtgcg cagacatcct ggccttcgcg gcgcgcgacg ccgccgtggc 120
cgcgggcctc ccgagatacg aggtcgcggc ggggcgcgcg gacggcatgc gtcgaacat 180
ggacgacctc ccgggcaact tccccgtgcc gggccaccac gtgccgcgcc tcaccgagct 240
cttcagccag cgggggctct cccaggagga cctcgtcctg ctctccggcg cgcactccat 300
cggcggcgcg cactgcttca tgttctccaa ccgcatctac aatttctccc aggacgccga 360
cgtcgacccc acgctggacc cggagtagcg caagtggctg cgccagatgt gcccgccgcg 420
gcagcccggc gacgaacccg agcaagcg 448

<210> 4763
<211> 473
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C4

<400> 4763

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agggaccggt cgctgccttc tggcgatgag ggatattacg ggtctgccct gaccaccgcc 120
cacgcgcagc caggggtaga aacgaccgcg tcaccgtatt tgaccctca ccgtcgaca 180
ccagtgtcgg cgagtccctc ctgtgcctcg tctccccct tccccctcg agtccagccc 240
ggcgccaccc actcagccgc ggatccgagg cgcagatccg atccggcgat ggctccacg 300
gcggcgaggc ggctgcggga gctgcaggcg cagacgggga acaagacctg cgtggactgc 360
gcgcagcgga acccgagtg ggcgagcgtc tcctatgggg tgttcattgt cctcgagtgc 420
tcgggcaagc accggggcct cggcgtgcac atcagcttcg tgcgctcggc cac 473

<210> 4764

<211> 422
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-C5

<400> 4764

ccccgggccga cccacgcgtc cacggacgcg tggggatagc agaggcaaag aagaagagag 60
tcgccgccgc cgccgccgag gagaagaagg tgcaggacaa cttctgctcg acgctgtgcg 120
agggcaggaa ggggatggac ctggtggtgt gcaaggagtc ctgcgacctc tcacagcgct 180
ccaacctggt gctgtacggc cggatccagt gcaagggcaa gtgcaccgag cagaagggca 240
tcaccgcgcc gcagatgaag gtgtgccaaag aggcgtgcga caaggactac gtggtcaagg 300
cngctgaggt caccaaggcc tgcaacacca cctgcgcccc agagaagcag cctctgctca 360
gcgagaactg caggaggtcc tgcaccctc ctccttctg aacgcagagc acgcccgcgcg 420
gt 422

<210> 4765
<211> 473
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C6

<400> 4765

ggtcaggaat tcccgggccg acccacgcgt ccagtcgtta tcgtcgtcgt cgtgggcctt 60
catttctcct agaaggtaga aggtcgagag gagaagaagg cgagacgtgc agtccgtcgg 120
gcaccgatcg agaacaggga agcaagaggc tgctagagat cgagctcatc aaccaaccaa 180
gtcgtacgtc gtcagcatca cgaccggatg gcgcgtgccg cgtccagcta tgtatccagg 240
agggggctct ccgcagcgat gacggtggcg gaggagtccg tgaagaagggt ggaggacaag 300
gcggtgaagc tgggaactgt ggccaaggac atcgccagcg ccatggccac cacgacggag 360
gagaagacgg cgttctggga acctgacccc gagaccggat actaccgtcc ggtcaccggc 420
acgaaggagg tggacgccgc cgacctgcgc gccgagatgc tcaagcggag gat 473

<210> 4766
<211> 472

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-004-Q1-E1-C7

 <400> 4766

 ggtctaggac tcccggggccg acccacgcgt ccacggacgc gtggggccaac atgaaggtca 60
 acaccaagat caagctggag cgggtcatgg cgccgtcgtc gtccttgccg cggagcgcca 120
 gcgagctacc cgacccgccg tcaccgttca gtcceaacac ggcgaccac cccgtctccg 180
 tgcccaccac acctaggttg tccttatcgt gtcgtcgtt cggccacatg gtgaccccg 240
 ccaccgacac accgccgatc acgcccacca agaagcagga cgacaagccg aagccgacgc 300
 cggaggccgc caccgcggcg aactacgcgt cgttgtgtc gcccaagcg ctcattgcagc 360
 gcgctgcccg cgctttccgc cgcagcaggt cgcgcgcccg cgtcaggacg gtcaaggacc 420
 tcgccgagga acgggcctca gtgctcgccg ccagcaacaa ggtctccgat ga 472

<210> 4767
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-B8

 <400> 4767

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 aaccgcctct acgccagggg gctgcaggac gtgtgcaggg actacctcaa ggacccacc 120
 atcgccgcgt tcaacgacat catgacgcc ggcaagttcg acaacatgta cttcgtcaac 180
 ctcgagcgcg gcctcggcct gctcagcacc gacgaggagc tgtggacgga cccacgcacc 240
 aagcccctgg tgcagctcta tgcattcaac gccaaaacct tcttcgacga cttcggccgc 300
 gccatggaga agctcagctt gttcggcgtc aagaccggcg ccgacggcga ggtcaggcgg 360
 cgctgcgacg cctacaacag cggccccgcc gtcgcccga ccataccaa gatgtgacga 420
 cgctg 425

<210> 4768
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B9

<400> 4768

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gagagaagct cagagaccgg ttcttggcct tccaaaaaag aagtagacat aagatagatc 120
tctccgcctc tctctgcccc acctctctcca acaagtaaca ttgaccgcaa acggatcatc 180
gtccggtgcg gtcaatgtaa ttaactaagc ttctcaatca tacatagctt ggcaaatgcc 240
tgaggggctag ctagacaagg tccgttgagc tagccccctt gggaagaagg gagaggaatg 300
gcgctggtgg cccgttgagc gaggaagagg ctattgagaa cccgttaaca agaattgcc 360
gcagcatctg gacaatcttg ttaacagagt tccaaagggt caattccaag cggataca 418

<210> 4769

<211> 435

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-C1

<400> 4769

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tgtgtctgtc tgtccgaccg tcagtcgctc taacaatcga tttccatgac gacgtccccg 120
cgcgtgtggc tgctcgccat ggcactggcg ctgcctgctg tgctgctcgt gaggtccgcc 180
gacgctgctg ccgaggcgct cccgactcca ggccggtcca cctacgggtg caacccggcc 240
acggacaagt cgtgcaagcc cgagggcgct ggggtggtgc tgccgggcgg cggcatcgac 300
ctcgacggcg acggtgacga ggacgagctg ccgcagttcn aacccccacct catgatcctc 360
ggccatggcc actgatgagt gtaaattggt tgttggttgg tcgtcctcgt ctgagccgat 420
ctactggacg acacg 435

<210> 4770

<211> 98

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C11

<400> 4770

gtccagttct aaatcgcgag cggccccctt tttttttttt tttgatttta aaaggaaata 60

tcatatatat tccatcacia gattacagaa cgacttga 98

<210> 4771

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C12

<400> 4771

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cccgtccttc ttctctgcct ccgttccatt ccgtcccgcg ctccaccgcc gccgccgcat 120

tcagggatgg agatgaagaa gatcgctgc gccgtcctcg tcgccgcctc ggccggccacc 180

gtggcgctcg ccgcggaggc tccggctccg gccccacca gcggctcctc cgcgctcgcg 240

cccgccgtcg gcgcgcctt cggggccgcg gtcgcctcct tcttcgccta ctacattcag 300

tgagccggcc ggggcgcccc gagggccagg aagagacgaa ggggagagag agtgacatgg 360

ctgcgcgcat tccgatgcgt gggcatgttt tttgattcga cacacctttt gtctcttttt 420

tctttgttcc ctctttctcc 440

<210> 4772

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C2

<400> 4772

ctcgcggggc gaccacgcc tctacactaa tccatgatac aacatggctg tgaatgtgag 60

aaccatgtgg tcgtcgatgc gggcacaggt tgcgatggtt gtggcgttgg tgttcttggt 120

gagaggcgca tgggtgcggc ctcccaaagt cccccaggc aagaacatca cggccaccta 180

tggcaaggac tggctggacg ctaaagcgac atggtatggc aagccgacgg gtgccgggtcc 240

cgacgataac ggtggcggct gcgggtacaa tgacgtgaac aagccccct tcaatagcat 300

gggcgcatgc ggcaacatcc ccatcttcaa ggatggtctg ggttgtgggt cctgcttcga 360

gatcaagtgc gataagcctg tggagtgtc cggcaagccc gtggtggtgc acatcacgga 420
catgaactat gagcctatcg cggcggtaca ct 452

<210> 4773
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C3

<400> 4773

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ctctcctcg gccaacgacg acgacgacga cttcgacgcc cacatcgggc tcccgcccat 120
cgcgcagaac gagcccatcc tcttctcat ctgggagcag atcgcagtgc tctacaccgg 180
caacctcgaa gcccgcgccg acgccgccgc cagcctcgtc tcgctggcgc gcgacaatga 240
caggtactct aagctcatca tagaggaaga tggcgtgccg ccgctgctca agctcgtcaa 300
ggaggcgcat ctcgaggggc aggagaactg cgcgctcgcc atcggcctcc taggccgga 360
tccggagtgc gtcgagcaga tgggtccaagc cggggtgtg 399

<210> 4774
<211> 442
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-C4

<400> 4774

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agaaaatgat gtgctaatta gcttagttct ggggacttca ggggttccat gccggcctaa 120
cctattggaa cgacttgta gttgttattc cattgcatcc aaagtccaca tgttattttg 180
ttaagctcca taatgctgtg gcatcgtgtt gcgaaaacat taattgggag aacattagta 240
catgaatact tgatcttcat agttcagttt tcgtgcatgt gcacttgta gttgcgaaaa 300
tgaactaatt tcccttgng aatangtat cccttgaaa aatggttttg ccanactacc 360
ccttanagga actaatcct ggcatatggt gtcagtggt cagtgcacga ggactcgaag 420
gaagcatagc atcatcggtt tt 442

<210> 4775
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C5

<400> 4775

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cgctgatgcg tccggcggaa cgtctaccgc ctgcgtcgaca aagttcttaa catcttcgac 120
gtcgtcaacc agccggagca agcgcacaag cacgggtact atccgcgtgc gcgctggccg 180
gcctggcagt tgtaatagcc gggatggtgt tgtatcgatc tcctttctgc acttgaatat 240
atatgtgaat aacgcttgag ataaatctgt attgctaggt gtagtgtaac ttgatcaggt 300
tactgctaac acggaatttc aggttttagga caggaggccg aagaaagaga caaaaggag 360
agacgtctta aaggatgcac 380

<210> 4776
<211> 459
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C6

<400> 4776

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ccccgtccca atggcccaga ctctgtccgc cgcctcgag ctggccaccc tgaagcgccc 120
gttcggcaac gacgggttcg gcgatggcag caacaacggc agcgcgaccg gcgagaagcc 180
caaggcgcg gggcgggagg cggacccggc ggcggcgatg gccgcggcgc ggcacgagtt 240
cggcgagcac ggcggcgtga acatgtccat cgaggcgctc gcgacgttca cggtgatgga 300
gccggacacg atgcggcggc tgttcgcggg cgagctgggc cccgaccgcg gcgacatgta 360
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ggagggcacg gaggcgggct actgcacggc gtccgggat 459

<210> 4777
<211> 400

<223> Clone ID: LIB148-009-Q1-E1-D1

<400> 4779

cacgcgtcca cactgaacgt accatggtat tttatgagaa canagaaaat ctttccaaat 60
 tatgggatat tctaccggtg tatgcatgga ttgacaaaaa tggttggttac ggccaaggaa 120
 tgattgattt aggctcacia atgatatttc taaaaagga tgaaccaa at gccttttggg 180
 gctttgaaaa attgatcctt aaattgcaag gaaat 215

<210> 4780

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-D10

<400> 4780

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 aaaatgaccc gtgccagcag cagtagcagc agccggcgtg tgacgctggt actgctcggt 120
 ctccgcctgc tgcttctggt tgggtgttgcg caggcggtag tggagttggt gcctgctgat 180
 gataatatcg ccgccgcgcg tgctggcacg gcgggtggacg atggcgagcc gcctcagcag 240
 tgcgcgaccc cgggtgagcgt ggaggaggcg tgccgcggcg cgtccgagac gcacgccggc 300
 gtggcctacg accactgcat ggcgtcgtg ggcgccgacc cgcgcagcaa ggaggccggc 360
 aacaagaaca tgcacggggt ggcgggtgctg gccaccagga tggccatcgn acacgccgcc 420
 agca 424

<210> 4781

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D11

<400> 4781

gggtcgaccc acgcgtccgc ccacgcgtcc gccacgcgt ccgcccacgc gtccgcgcga 60
 gcaaccagcg atcgccccat ggccgccatg gtcgttccg tctccctcgt cgtggcgccc 120
 cttctcctcc tctccctcct cgtctccgcc gcggccagtg cgcggaccgt gggcgacacc 180

gtgcaggacg cgtgcagcaa gaccagttc cccaagatct gcgtggacag cctcgccgcc 240
aagccggaga gccagaaggc gacgccgcgc aagctggcgg agctgttcgt gaacatcgcg 300
gccgagaagg gatccgggat ggccaccttc gtgcaccgca agtacagcga caaggaggac 360
agcgacatat tcaagtgcta cgacagctgc tccgacgacg tggaggaggc cgtcgcccac 420
ctcaacggcc tcgtccggga gc 442

<210> 4782

<211> 449

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-D12

<400> 4782

tagccgtcta gnattcaagg gccgaccac gcgtccaaac acagttgagc gcgacgatgg 60
gatccctcgc taataacatc atggtcgtgg gtgtcgtcct tgcagcgctc gtcgccggcg 120
ggatcatgcgg gccccgaag gtgccgcccgt gtcccaacat caccaccaac tacaacggca 180
agtggctcac cgccagggcc acctggtacg gtcagcccaa cggtgccggc gtcctgaca 240
acggcgggtgc gtgcgggatc aagaacgtga acctgccacc ctacagcggc atgacggcgt 300
gcggcaacgt ccccatcttc aaggacggca agggctgcgg ctcatgctac gaggtgagat 360
gcaaggaaaa acctgagtgc tcgggcaatc cagtcacggt gtacatcact gacatgaact 420
acgagcctat cgctccctac cacttcgac 449

<210> 4783

<211> 127

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D3

<400> 4783

gacgcacgcg tccgaactga aataacgtcg gcctcaaac gagatggtcg aacaagagga 60
tacaagctta catgtgcatt catgctaagg cagtgtcttt ctatagtgtg tgtaacattc 120
aattaat 127

<210> 4784
 <211> 469
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D4

<400> 4784

ggtccaggag tcccgggtcg acccacagcg tccacgatgg gatccctcgc taataacatc 60
 atgggtcgtgg gcgccgtcct tgcggcgctc gtcgccggcg ggctcgtgcgg gccccgaag 120
 gtgccacccg gcccacacat caccagcaac tacaacggca agtgggtcac cgctagggcc 180
 acctggtacg gtcagcccaa cgggtgccggc actcctgaca acggcggtgc gtgcgggatac 240
 aagaacgtca acctgccacc ctacagcggc atgacggcgt gcggcaacgt ccccatcttc 300
 aaggacggca agggctgcgg ctcatgttac gacgtgagat gcaacgaaaa acctgagtgc 360
 tcgggcaatc cagtcacggg gtacatcact tacatgaact acgagcccat cactccctat 420
 cacgtcgact tgaacggcaa cgccttctgc tccttggaag agcccgggc 469

<210> 4785
 <211> 308
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D5

<400> 4785

ccaagcgtcc acccacgcgt ccgatcgatc atgacatgat ggcgtgcaca gacaatgcga 60
 tgagagcctt gttcctcctg gtcctcttct gcatcgtgca tgggtgagaag gaagagtcaa 120
 agggcatcga tgctaaagcg tccgggcctg gtgggtcctt cgacatcaac aagttgggag 180
 cctccggcaa tggcaagaca gacagcacga aggctgtgca ggaggcatgg gcatcggcgt 240
 gcggcggcac tgggaagcag acaatcctca tacccaaggc cgacttcctt gtcggacaac 300
 tcaacttc 308

<210> 4786
 <211> 440
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-009-Q1-E1-D6

<400> 4786

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 accccggaga ggtccagttc cggcgaggct gtgacgttac accgggtgtg taccacatcg 120
 cgaaatggaa tggcacaaag gtttccgtaa aaatacttga cagagacggg tgctccgatc 180
 aagaagccgc aaactctttc aggcataaat tgactgtgct ggagaagggtc cgacacccta 240
 acgtcgttca gttcgtcggg gccgtcactc agagcatacc tatgatgact gtgtctgaac 300
 tccatgaaga gaaagactta tcagtctgta tccagaaaaa aggaaagtta aagcctcaga 360
 aggtgctaag atacggcctt gatattgccg agggcatgac ctacctccac cagtgcgaang 420
 ccggacccat catccactgc 440

<210> 4787
 <211> 287
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D7

<400> 4787

gggtcgactc acacgtccaa tcgattcgca cgccggtgga cggcgtctca ctagccaaca 60
 acgcgacgat cgggttaaaa ttctcatcta ccggccaggg caattctgtg gctcgattga 120
 tcggtctgtc gtaaggcaat tgatcaagct agatatatat ataggagatt cgtcgaacga 180
 gctactagcg aaatgggttc cgccgtcctc ttttactgca tctggatcgc cgtcacgcgc 240
 acattgtcct cgtccatggt cgctgtcggg gacggagacc cggggga 287

<210> 4788
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D8

<400> 4788

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 caaatttggg gcgcaatatg gctgaagaga agagccgtcc gcgggtgaac gagcggatca 120

tgtcgtccct ctcaaagcgg tcggtcgctg cgcattcctg gcatgacctt gagataggac 180
 ctggagcccc tgctgttttc aattgtgttg ttgagatcac aaagggcagt aaagtgaaat 240
 atgagctaga caagaagacc ggaatgatca aggttgacag ggtgctatac tcatcagtgg 300
 tctaccacaca caactacggt ttcattccac gaacattgtg tgaagacgga gatccaatgg 360
 atgtgctggt gttgatgcag gaaccggtga tacctggctg ttttcttcgg gcaagggcca 420
 tcggccttat gcccatgatt ga 442

<210> 4789

<211> 461

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D9

<400> 4789

gtagccgtct agaattcaag ggtcgacca cgcgtccatt tttttttttg agcagcaaga 60
 aaatctattc atttgacacg tctccatctc attgagcatt taattatattt tgggcaggaa 120
 agaacacata ccagagatga ggttggttgg ttaatttgat tctaagtcct aatgaagaag 180
 attgtgagct cgggcccggc ggtgccgccc tctgggttgt gcatgtagta cgtctcggag 240
 tccttggaac cgacgaggcg gtcgaaatgc gcgcgcatgt aggtgagctc gccgtcggac 300
 ggggtgggaca tatcggacgg cagcacgccg gcgcccattg acgtggagtg gagcatccgc 360
 atcacgcagt cgtcccgtc cgtcgctccc cgccgcgacg cgtgcccgcg actctcgccg 420
 ttcacctcgg ccgtccagac cggctcgtcg agcagcctcc t 461

<210> 4790

<211> 302

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E1

<400> 4790

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 ccaccaccgt agcaccacac gcaggtacga agaaggcgac gaacatggca aggctggcct 120
 tgggtaccggc ggtggttctg tgcctcctgt taccaacagg gccgcagggg gccatcagcg 180

ccgaggggat ggtgtcattt gacaatttga tcagctgcaa ggtactgggc aactgcaaca 240
 agaacctggg ccccgaggcc tcccgccag ggaaaccgc caacgactac acccgcggtt 300
 gc 302

<210> 4791
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-E10
 <400> 4791

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 aactctcgcc gccgccatcc gagcgaacaa gccaaaccgac cccgtcccca aggcaatccg 120
 ccgccgacgt accaccacca ccgcaggagc gagatggaga tgaagaggat cctcttcgcc 180
 gtctctgctg tcategcgc ctcggccacc gcagtgtggt cctccaccga ggccgccgcc 240
 ggggggccc caactgctc cgagtcgtcc gccgaggctc ccgctggcgc tggcgctggc 300
 gctgccgtg gcgccgcgc cgcggggccc tccgccagca gcggcgcgcc cgccctcgcc 360
 gccgcgccg ccgcgtctct cttctcctc ctcgcctact acctccacta agcgtgtgcy 420
 tggctacgta cg 432

<210> 4792
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-E12
 <400> 4792

tagccgtcta gaattctagg gtcgacccac gcgtccaccc aggcgtccgc gtggacgccg 60
 tcagcgacgc tgatatctc gcgcattctt tgctgggtgt gctgctgcc gctgagctgc 120
 tcgctctcgg cgcgtcctg ttcgtcagta tattcaggtg cttacatagg ctcacacgcc 180
 ggttcacac tccgttcgtt cggttcgtaag ccgtctacat acacgattct tttgtccac 240
 acacacacat acacatacac gtctgcaaag tacatgcgac attgcagctg cttcgcatgt 300
 atgtatgatg aatgaaatga aaactcaaac acattctcta attcttttgt tccgtccaaa 360

acaaaatcat tcggaatcac catcaacc

388

<210> 4793

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E2

<400> 4793

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gatacgtgaa atccaacccg cgggaggtgg agaacgccac ctggatgctg acggtgttcc 120

actgcttcgg ccactacttc tgcctgcact tcgaggcggt ccagctcggg atggcgcccc 180

tgtacatggc ctctctccgc ttcattggggg acgagaacga ggccaagaac tacagctaca 240

gcctcgaggt cggcgccaac gggaggaaga tgggtgtggga gggcacccca aggagcgtcc 300

gcgacagcca ccgcaagggt agggacagcc acgacggcct catcatccag aggaacatgg 360

cgctcttctt ctccggcggg gaccggaagg agctcaagct 400

<210> 4794

<211> 202

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E3

<400> 4794

ccacacgtcc aaatcgccag caggagctat ggggcagga catccgccgc cgccgtggca 60

ccatggtcatt tgcgattcgc tagcgtctga ttgagggctg tggcctagt atcttcgcaa 120

aggcacgcgg atggttatca tgccttcacc atgcggttct ggggccc aaa cggtaatgaa 180

ttgtcaggac gcacccctca at 202

<210> 4795

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E4

<400> 4795

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cctccgacca ccgtacgtcc tccaccgcgt cgcgcgcggc cggcctctgc ccagcccggg 120
ctgcctgcga gggcttctga tggccctcga cgcgcgcctt tcctcctagt gccagcttt 180
attgcagatc cagccctctg atcctcgtct tctttcacct ctccaacatg aaggtcaaca 240
ccaagatcaa gctggagccg gtcattggcg cgtcgtcgtc cctgccgcgg agcgccagcg 300
agctacccga cccgcgcgta ccgttcagcc ccaacacggc gcaccacccc gtctccgtgc 360
ccaccacacc taggttgctc ttatcgtgct cgtcgttcgg ccacatggtg accccgcccc 420
ccgacacacc gccgatcacg cccaccaag 449

<210> 4796
<211> 448
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-E6

<400> 4796

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accgcgacgc aagaggcagc gatccgtatg tcgtcctacg gcttggcaag aagaaactga 120
agacaagcgt gaagaagaga tccgtgaacc ccatatggca agaggagcta actctgaccg 180
tcacagatcc cagccaacca ctgaagctgg tgagttagca gcaagcagaa cgatcctgtt 240
tgtgattcat tattctagac tgtttgctac aggaggtgtt cgacaaggac accttcagca 300
gagacgaccc catgggagac gcggaggtgg acgtggcgcc actgatggag gcggtgagca 360
tgaacccgcg ggaggagagt ctgaggaacg gcgccatcat caggtccgag cggccgagcg 420
ccaggaactg cctcgccgac gagagcca 448

<210> 4797
<211> 442
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-E7

<400> 4797

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caggggcttg tcatggcatc caaacgtatc ctcaaggaat taaaggactt gcaaaaaggac 120
cctccaacat catgcagtgc aggtcctgct ggtgaggata tgttccactg gcaggcaacc 180
atcatgggtc ctctgatag tccatatgct ggaggtgttt tcttggtgaa cattcatttc 240
ccgccagact accccttcaa gcctccaaag gtatctttta agacgaaggc cttccatcca 300
aacatcaata gtaatggaag cataagtcct taaaatccta aagancaatt gaacccttgc 360
ttgacaatct ctaagggttt gctttctatc tgctccctgc ttactgatcc caaccagacg 420
accctcttgc ccctgagatt gc 442

<210> 4798
<211> 432
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-009-Q1-E1-E9
<400> 4798

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cctgcaatcc ctaacaggaa tagcaaggag atcactgcct tggctcccag cagcatgaag 120
atcaagggtg tcgtcctcc agagaggaag tacagtgtct ggatcggagg atccatcctg 180
gcatccctca gcaccttcca gcagatgtgg atcgccaagg ccgagtacga cgagtccggc 240
ccatccatcg tccacaggaa atgcttctaa ttctttgggc ccgagaaatg caagccgtgg 300
gggagccgtt accgcgcca gcctctcctg cccccgtttt cgttgccgtt tcttcattag 360
cgcgaacaaa gttttgtgcc ggtctatcgg ccgccgttt cctcccctat tcatcaagac 420
cgcaataact gt 432

<210> 4799
<211> 220
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-009-Q1-E1-F1
<400> 4799

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tccctttgcc tgatgttttt gtgggggaca aagggaggcc agaagcggta gcaccgccgc 120
 cgcgatcatgg ttcgccggag acatacacia agacaggaag caaaacatgc aaaattgccca 180
 ccgcttctca ctcaatttta tgctcgaatg tgaatctcat 220

<210> 4800

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F10

<400> 4800

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 gcgctctaca tggaaggcga gaccggcgcc caaatcaacg gaatcactgc tccgcgctct 120
 ccagacgcgg acgggattgc ggctcgatc cgcgctctcc gggttcgccc agatcgacgg 180
 cgtccgcgcc gcgcttgccc agattgacga aatttgagc ctccagacgc gagtctggcg 240
 ctcgctattc gtggaaggcg aggagagacg acgcacggc tctcgatccg cgctctacat 300
 ggaaggtgag gcagattggg ggagtggctc gtggccgctc cctcggcggc gtcctccgtg 360
 ccgtccggcg aggtgtcgtc caagcacggc ggcgacgact acgtgattgt gggcgggccc 420
 aacggcaacg ccgtcgcgcg cc 442

<210> 4801

<211> 456

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F2

<400> 4801

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 aacgagccgg cgggcaagtg gatggacctc atctaccagg ccctgaacag gccgccgccc 120
 caccaggacg gccagtcctc cggcgacgag ctctcgccgc cgccgtccac ctctcctcc 180
 cactacccca gccggccgca aggtgccgcc cgcgacccca gcaacgcgc cgccatcccc 240
 aagacctcca gcggcgccat gctctgcgcg cagaagccgc cgccgccgct caagatggtc 300
 agcaagtgct accgcgtcga caacgcgctg gtgaagacgt gcacctgcat gtccgacccg 360

tccaacatgc agctccgggc gcgtgagatg cgcgagttcc tctgccgcgt ccaggccgcc 420
gcccctcgc cgggccgcgg cgccgacgac gacgcg 456

<210> 4802
<211> 361
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-F3

<400> 4802

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tcgagaagcc caggggaagtg tgccggagca tcattgagtt cttcaaggag ccggtcgctg 120
gagctgcaaa tgcggacgac aaggtgtagt agcttccacc aatggcggac gtggacaggt 180
cttcgctggg catcggcaga cggcgacccc gcttgtggca cgcaaacaca aggcagatac 240
gtggcattgt acatctacat ccctctgcca ttgttctgat gtacttaaag ggtgtatgta 300
gagtcattgc agtagcgatt catanagcat gtaacgggga acagagggaa acatagtggc 360
t 361

<210> 4803
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F4

<400> 4803

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cgctggcgct accgtaggtg ctggtgtctc gggaggcgct aaagtgggtg gtggcgttgg 120
aggaaacgcg ggaggaagtg gcaaggcgta tacaggaacc ggtgccgatg cgggtgtttc 180
cggtggagga tccggtggcg tcgatgctgg tgtctccgga ggcgcaaag ttgacggcaa 240
cattggagga aaagcgggag ggagtggaaa tgcataact ggagctgatg caggtacaag 300
tgtttcaggt ggaggatccg gtggcgccag tgcaggtaca agtgctaccg tgggtgctgg 360
tgtctccgga ggggtgcaaat ttggtggtgg cgtaggagga aatgcaggag ga 412

<210> 4804
 <211> 358
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-F5

 <400> 4804

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 ccaacaaaga gctcgacgac atgaactcga tctctagcag catcggagat ggagctaaat 120
 ggatgggtcaa caaaatcaaa gggaagatgc agaaaccgct gccggaggtc ctcaaggagt 180
 acgacctccc agcaggcctg ttcccgagg acgcgacgaa ctacgagctg aacgaggaca 240
 ccaagctcct gacggtgtac atcgcgtcgc cgtgagaggt gggctacaac gactcgtcgg 300
 tgctgcgctt cgccaccacc gtgacggggg acctggagaa ggggaagatg acccacgt 358

<210> 4805
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-009-Q1-E1-F6

 <400> 4805

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 tcgtggggtt ggtgatcacg gcctgatggg gtcgtggcgc aaggcctacg gcgccctcaa 120
 ggactccacc aaggctggcc tcgccaaggt caacagcgaa ttcaaggaat tggatattgc 180
 aattgtgaag gcaaccaacc atgttgaatg ccctcccaag gaacggcacg tcagaaaaat 240
 actcttggcg acctcagcaa accgccctcg cgcagacctc tcgtactgca tatacgatt 300
 gtcaaggaga ttgtccaaga caaagaactg gatagttgcg ctcaagacat tgatagtgg 360
 gcataagctt ctganggaag gcgattccat gttcaaagaa gagttcctgg cctactcatc 420
 cananggaac atcttgcaca 440

<210> 4806
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F7

<400> 4806

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tcgtcaacgc gcccaccgcc aacaccatcg ccgcggccga gcacggcatc gcgctgctcg 120
cctccatggc gcgcaacgtc tcgcaggcgg acgcggcgct caaggccggt aaatggcaaa 180
ggaacaagta cgtggggggt tctctggtgg gaaagaccct ggccgtcatg ggcttcggga 240
aggttgggtc agaggtagcg aggcgagcga aagggtcttg gatgcacgtg atagctcatg 300
atccctacgc ccctgccgac cggggccgtg ccctcgggggt agagctgggt tctttcgacg 360
aggccatcgc aagagccgac ttcattcttc tccacatgcc gctgataccg acgacg 416

<210> 4807

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F9

<400> 4807

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gtggcgccac tgatggaggc ggtgagcatg aaccgcggg aggagagtct gaggaacggc 180
gccatcatca ggtccgagcg gccgagcgcc aggaactgcc tcgccgacga gagccacgtg 240
tgctggagga acggcaagtt cgcgaggac atgacctcc ggctcaggaa cgtcgagagc 300
ggggagatac agctgcagct gcagtgggtg aacttcctc ctggtcctgc tcctgctgct 360
gcaacaacca ggtgacctga tgatcgatgg tagctgctgt tcctgtcgcc attgcctcct 420
gct 423

<210> 4808

<211> 472

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G1

<400> 4808

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 aagtgggaca ggaagctggc gcggcaggcg cggcgctggt ccaaccgcat gcgcaaggac 180
 tgcgagctcg tccacagcgg ccacaagtac ggcgagagcc tggttcaggag ccacgacgac 240
 tggaacgcca ccgccaagga ggccgtcttc tggtggggca aggaggagtc catctacgac 300
 aggaacacgg agcagtgcac aggcggcagg gcgtacaagg agtgcggccca cttcgcgctc 360
 atggtcggca agaggagcac caaggtggga tgcgcacgag cagagtgttt caagggaggc 420
 gtcttcatca catgcaacta ctatgccacg gacctaaga agaagaacaa ga 472

<210> 4809
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-G2
 <400> 4809

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 gatcgcgctt cgtcgtgaag ccgctcacat ccgcggtcgg cgtccggtgc tgcctaaatt 180
 ttggtatctt cggattcatg gtaaaagcag atacaatgag gagcttgatc gtgacaaggg 240
 ttgtcgtcgc tccgaagctg tgcgaaaggg agcttcggct aaatcgcaga aaaggggaacc 300
 gacttaaaag ggaaaaggct gttcagtcct catagatttt tctataagcc aatagtaaatt 360
 gtaaagggca taattgtatt ttccataggc tgtgtcctgt gcctataaat agatgaac 418

<210> 4810
 <211> 468
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-G3
 <400> 4810

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 gccttctctt cctccctggc atggaggaag tagctgtttc gcctatgatc gttgccgccc 120

tagtgctgga caacaatggc gctgacgcgg tctcctgcac tgccatccct agcgtaacaa 180
 taagcctaga ggagaaagaa aatatcaatg gggatgttcc cacgatcacc tcggccgcaa 240
 gcaacgagga ggaggcggtt ttcagtgtcg gagaatccac caaggacgat ggccatcgct 300
 tgacgatgga atgtccact cccgtctcct ccagtagccc ttccactcgc aagaagcgcg 360
 gggcggttcag cctcttcaag gcgatgttcc tgtccttcgg ccggagcgac gacagcatga 420
 agaagacaga cgacgacacc acgagcccca agaagagagc catcgcg 468

<210> 4811
 <211> 349
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G5

<400> 4811

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 ccgcgcccgt ccttcgtccg cgctccgtt ccgttccgtt ctgtctcgcg cgccgcccgc 120
 gccgcattca gggatggaga tggacaacat caccggcacc gtcacgtcg cagcctcggt 180
 agacaacatg gagctcgag cggaggctcc cgcaccagga cctaggacgc gtcacccac 240
 gatcacgcct ggcgtagtgt ccgccatccg agcagcgatc atcgccatcg tctgataata 300
 gaatgagtga gtcgggtgtc gtcgattacc ccgtcgactc ggaagaaac 349

<210> 4812
 <211> 339
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G7

<400> 4812

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 cagcacgcta agatcgactc gatcatggac ctgtgggaca acgtgttcga cacgcactgc 120
 cggttcgacg tgcacgtcat gctgggtgtc atccaggtea gcacgtcggt cagctaccgc 180
 atctgcatct ccatcatcat ggcgcacatc aatccgcatg ccgcgtcgct tgcctccgcy 240
 ctcttctccg cgatcgtgct cgtcatcggg gtcacgatgc ctttcaagct ggggctcaac 300

tcgatgatca cgctgacgct gctcgcgccg ctcagcatc

339

<210> 4813

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G9

<400> 4813

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attccgagag cggctgaaga tacttggcaa ggtggctaata ctggaggatc ttcctttgag 120
tgcagcggag aggaagctaa tgcattgcgt taacgagaag cctgtccttt ctagaccaca 180
gcatgagttt tacctgggtg ataactactt cgagatcgac attgacatgc acagatttag 240
ctacatctca aggaaagggt ttgcaacatt tttggacagg ctaaaagcat gtgttctaga 300
tgttgggcta actattcagg gaaataaagc tgaagaactg ccggaacaaa tcttatgctg 360
tgttagggtg aatgggatag attacaccaa ataccagcct cttttgactc acgctgcct 419

<210> 4814

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H1

<400> 4814

gtaacgggtcc agaattcccc ggccgaccca cgcgtcaaga agaaacttaa gacgagcgtg 60
aagaagagat ctgtgaaccc catctggcac gaggagctaa ctctgaccgt cacagatccc 120
agcctagctc tgaagctgga ggtgttcgac aaggacacgt tcagcagggg cgacccgatg 180
ggggacgcgg agatcgacgt ggcgccgctg gtggaggcgg cgaacgcgag cccggaggcg 240
agcctgagga acggcgccat catcctgtcg gtgcggccga gcgccacgaa ctgcctcgcc 300
gacgagagcc acgtgtgctg gaggaacggc aagttcgcgc aggacatgat cctccgcctc 360
aggaacgtgg agagcgggga gattcagctg cagctgcagt gggtcagcat ccctcctgct 420
gcag 424

<210> 4815
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-H2

 <400> 4815

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 gggcgacggc ccggaagcgg ctggcgcgagt gcgcgcgcgg gtteggccac aggaccgtcc 120
 gcggcgcgaga cggcaagctg tacgtggtga gggacccgag cgacgacgag atgatcatcc 180
 cgcggcaggg cacgctgcgg cacgccgtga tccaagaccg gccgctgtgg atcgtgttcg 240
 cacgcgacat ggtgatcgag ctgcggcagg aactgatcgt gaaccacaac aagacgatcg 300
 acggggcggcg cgcacagggtg cacatcatgt tcgcacaaat cacgctgcat aacgtgcaga 360
 acgtgatact gcacaacctg cacatccacg actc 394

<210> 4816
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-H3

 <400> 4816

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 ggccgggggcg ccgccctcct cagcgctgcg aaagcgacct caacatcagg gagcaccgct 120
 cctgcagcga ggtggccggc ggcaccgcgg cgggctgcgc cgctgtgtgc tgctgcttcc 180
 cctgcgtcat ggtggaggte gcggtgctcg ccacggtgcg cgcgcccgcg gcgctgtgcc 240
 gcaaggccgc ccgcgtgcgc aagggccgca ggcgctctgc ctccgcgggc caggccacgg 300
 agatatacga gctcctcgtg gacgacaccg gcgtcgtcga ggtggatgcc ggcgccgcca 360
 atgcggtggc gctgcccgtg aagcccgcct tgcagctgga gggaaaaggg ga 412

<210> 4817
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-015-Q1-E1-E4

<400> 4817

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cggcattaga ttctattgct gtttgtttgg ctacgataa tgatcataga aaagtggagc 120
aggcactggt gaaaaaagag gcaattcaaa agttagttaa gttcttccaa gactgcccag 180
aacagtatgt tgtccatata ttggactctt tcttgaagat aataatgaaa tcttctaggc 240
taaacacagc aatggccacc aatggcttga cagcattgct cattgcaagg cttaaccatc 300
gagacgctat tgcncgctg actctgctga aactcataaa ggttgtctat gagcatcatc 360
ctcgacaaaa acaggtcata gtagagaaat gactccctca gaagctaca 409

<210> 4818

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E6

<400> 4818

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tgctgggctt tgaggatagg aagctgcca tccaccacat ccctggcccc gaaggggtcc 120
gcgggcgcaa ctctgacaac acccttatca aggagaagct tggctggggc ccgacgatga 180
agctcaagga tgggctgcgg ttcacctact tctggatcaa agagcagatc gagaaggaga 240
agacgcaggg ggtcgacatc gggcgctacg ggtcgctcaa ggtggtgtcc acccaggcgc 300
ccgtgcagct gggctccctc cgcgccgccg acggcaagga gggcctctaa gcgacgaccc 360
aaggctgggg ctgtcttcgt ccatcacagc tggcgtagca tggcaggata tactgtttgc 420
ggtagaatat cac 433

<210> 4819

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E7

<400> 4819

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tgaagcgccg ctacagaggct cgccacggac gaggtcaaga cggccgccac tcacgaggcg 120
cggcggggcg tgaacctctg taatacctac tacctgtacg ccgccgacaa actcagctcc 180
tgcaactcgc gccatcaagt cttccgctca ctctctcacc atcctcgcca cgataacccat 240
gctggttcat gacacgcaaa actgcaacta agaattctcg aaagccgtct ccaggaaccc 300
catggctgac cacaacaggt cgctcatcgt gatatccgat atctgacaca cgcgctcc 358

<210> 4820

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E8

<400> 4820

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tcaaggagaa gagcagcacc acggccgtga tccgctacaa gggctccagc gccccgccgc 120
cggccaagct gccggagggc cccagcgggt gggcgtggtc catcaaccag tgcaggctct 180
tccgctggaa cctgacggcc agcgcggcgc ggcccaaccc gcaggggctcg taccactacg 240
gccagatcaa catcacccgc accatcaagc tcgccatggg ccgcggcaag gtcgacggca 300
aggagaggtt cggcttcaac ggcgtgtcgc acgtggaccc ggaaaccccc gtgaagctcg 360
ccgagtactt caacgccagc gacggcgtgt tcaagtacaa cctcatcggg g 411

<210> 4821

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F1

<400> 4821

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gtcgttcacg agattcatca agaaacagtg ggtaagtga tagttgacat gtgtagagtg 120
atcaggtaac tactgaccag caacacccca gcaccacat tttgcagcat ttcttctggt 180
gtggcacttc cttgatcaca ttcacatgta atatctggga gttctgatct agaactagat 240

tgaagtattg aattgctact gtggagggtg ctgctgctta tagctctcat cccaagtgag 300
gagcatgcct tgtcctcagc aaggtccttg cccaggaatg taggcagctt tactcagccc 360
tttgaccttg atggcacata caggttgaaa gattaacgat gccaaaatga tatggcttgt 420
ata 423

<210> 4822

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-015-Q1-E1-F10

<400> 4822

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gacacttttg ggtttggccg gatcatacat gatggcctca tgttcaagca gaacttctcc 120
attaggtcct atgagattgg ggctgatagg acggcatcta tagagacaat gatgaaccat 180
ttgcaggaaa cggcacttaa tcatgtgaag accgctgggc tgctaggtga tggattcggc 240
tccacaccag agatgagtaa acggaactta ttctgggtgg ttagccagat gcaggctatc 300
gtcgagcggt atccatgctg gggtgatact gttgaagtaa atacatgggt tagtgctaata 360
ggtaaaaatg gaatgcgtan ggattggcat atacgtgatt ctatgacagg ccacacaata 420
ctg 423

<210> 4823

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F11

<400> 4823

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cgccttcacg cctccctcac caaataaggt cccgcccttt tccgacattc acagggggga 120
caggaaatca gcggccatgg cctcgattcc ggcgacgacc ttcgccgtca tcttatccgt 180
cctcttctgt gccgaggctg gcaccgccgt cgacaacgac ctccccgact acgtcatcca 240
gggccgcgtc tattgcgaca cctgccgcgc cgggttcgtg accaatgtca ccgagtacat 300

cgcgggcgcc aaggtgagggc tggagtgcaa gcacttcggc accggcaagc tcgagcgctc 360
catcgacggg gtgaccgacg ggaacggcac gtacacgac gagctcaagg acagccacga 420
ggaggacatc tgcgaggtgg tcttggtg 448

<210> 4824
<211> 412
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-015-Q1-E1-F2
<400> 4824

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tgctttggcc cctcggagtt ttccgttgcc gtgaccatct tcggcgggcg tggccatgcc 120
gggacatggg gaaaggcact tgggtgcagag gtctatgact gcaacaacat ggtggagcag 180
gagctgcctg gaggcgggct cctcgtgtac cagagcttct gtgctgctga agacgctggt 240
gctacctcgc ccaaactctgt ttccactgc ttgacggcg agaacgtgga gagtgtcct 300
cctcctatga agaaggacta caaactggct aatcttctat gctgggagga ggaagcggat 360
gccatggagg agaaggcggg agtgcttgat gagtaagacg ggcttctggg gt 412

<210> 4825
<211> 446
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-F3
<400> 4825

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gaaatgtatt gaaatgcttt gtgctcctga tggtagctt cctgagaagc tgaggaatct 120
agaacctcgc cttattgaac atgtcagtaa tgaaataatg gatagggatc ctaatgtccg 180
ctggaatgac atagctgggt tggaacatgc aaagaagtgt gtgacagaga tggatgatg 240
gccactgcta cgtcctgata tattccgtgg ttgtcggctc cctggaagag gtctactggt 300
gtttggacct cctggaacag gcaaaacat gattggaaag gcaatagctg gtgaagccaa 360

ggcaacatatt ttctacatat ctgctagttc actaacaagc aaatggattg gtgaggggtga 420
 aaaacttggtt cgggcacttt ttggtg 446

<210> 4826
 <211> 439
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F4

<400> 4826

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 gtggccgtgg aggtgccacg ggtgcacctc gctgacgttg cgcgacagcg cgttggcggtt 180
 ctggagcagc acgtcgacgg tgggtgtgtg cgccaggacg tacacgttgt cccccaccgt 240
 cgtgttgggg ttccggcgcg gcagcgtcac gtcgtattcc cggctgaacg tctccgcggg 300
 gcgcgccgcc gccagcgctg acttgagccc catcttcagg gagcccaggt acggcggtggc 360
 gggcagaaac atggacacgt tgttgatggg acacctgatg cgcccgcca tccggttctg 420
 cgtgttgagc aactcgatg 439

<210> 4827
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F5

<400> 4827

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 aaggcagtgc tgccaaggca cctgaggctg ccaagagaac tgctgcccc gctgaagcac 120
 ccggagccgc gtccaccccc gtcgcccggc ctgccccatc atcgctgtct aggaagtctg 180
 gtccagctac cgcgccagcc accgcctcta ccccccttc ttccacggac gaggagtga 240
 gcccttcccc gccagcatcc accgccggc cgtcccctgc ggctgagggg cgggctgctg 300
 atgactccgc cgggtgctgct gcccttgga gtggagctgc catcgccggc gttgccgctg 360
 ctgttgctac catgattctc ttctactaaa ctcaacgacg a 401

<210> 4828
<211> 324
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F6

<400> 4828

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accccatggg gaagtttgac aaggagctca accagatggc cagcaactgc atggctcttg 120
caaacatgat atgaaccacg catgcaaccc cagcgtgagg tgccatcgca tgcagggaaat 180
gcttgcatte atttttcatt taattaagaa ttcattgaaa ttatgagtta tatatatga 240
gtaactctat gtatttggtc ctgacctgca ctatttattc aatagtatgt catgaaacga 300
ggtagagcgc ctttcattgc cttt 324

<210> 4829
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F8

<400> 4829

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ctgcaaatgt gcgcaagatg tttttggaca tggacagtga actatttgaa gagtgccagc 120
agcagtacat ggagaaacaa gcgaaagcca aagagatata ggaacaacga gaatcagcat 180
ggagacaatt ggaagctggt gttgctgcc aaggctgctgg agatgacatg gttttggtca 240
actagatgat agctgctcac ttatttcatt agcgtcatgt gcgcttatcg aggcaacaag 300
gtatcgggtc tagttgcggt gctcttatat caacattggt gacttgggac tatcagatcc 360
atgttccttg catcagtgc aaaaaatgcg gaccgagttt gaacacattg gtggcaacga 420
aag 423

<210> 4830
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F9

<400> 4830

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atgagagcct tgttcctcct ggtcctcttc tgcacgtgc atggtgagaa ggaagagtca 120
aagggcatcg atgcgaaagc gtccgggcct ggtgggtcct tcgacatcac caagttgggc 180
gcctccggca atggcaagac agacagcacg aaggctgtgc aggaggcatg ggcacggcg 240
tgcggcggca ctgggaagca gacaatcctc atacccaagg gtgacttcct tgtcggacaa 300
ctcaacttca cagggccttg caagggcgac gtgaccatcc aggtggatgg caatctgctg 360
gcgaccacgg acctaagcca gtacaaggac catggttaatt ggatcgagat tctacgcgtg 420
gataacctgg tcatcaccgg caagggaac ctt 453

<210> 4831

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G1

<400> 4831

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ccgccgcctg ctcgatccgg tgggaactcg ccgctgccgg gttgttttcg ctgggtgatt 120
aaggctcggg attcgagatc tacgcgagtc gcgggcaagc agccatgagc gaggtgttcg 180
agggtacga gcggcagtac tgcgaggcct ccgcctcgct ctcccgaag tgcaccgctg 240
cctccgccct cgatggggag aagaagaagc agaagctgtc cgagatccaa tccggcgctg 300
aggaagctga atcgctgatt cgtaagatgg acctggaggc aaggagccta cagcctagca 360
ttaaggctgg ttgcttgca aagctgaggg agtataaatc tgacctcaac aacgtcaag 419

<210> 4832

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G10

<400> 4832

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 cgccgccaca gccacatggc ggacgacgcc gtcgccgccg gagcggccgt ttgctgcgca 120
 gggccggcct cgctgtcttc tagcaggaag cagcagcagc agcccgacga cgccggctgc 180
 ggcagcagca gcagcgacga ccactaccag cacgacgtga tcatgctgag gcggacgagg 240
 agcggggcggg cattccccgc gccgatctcc gtgatcggca agggcgggcg gccgtggctc 300
 tgctgcggg cgcaccgcga ggggtggacgc ctcgtgctgc ggcagatgca cctgccgtcg 360
 cacgagctgc tgcagccctg c 381

<210> 4833
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G12

<400> 4833

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 aaggacgaga aggacgtgga ggacgtgaag gtgacggggt gcacgctcgc cggcaccacc 120
 aacggcctgc gcatcaagtc gtacgaggac tccaagtcgt cgctcaaggc caccaagtgc 180
 ctgtaccagg acgtcaccat ggacaacgtc tcctaccca tcatcataga ccagaagtac 240
 tgccccaaca acatctgcgt caagtccggc gcctccaagg tggccgtcaa cgacgtcgtc 300
 ttcaagaaca tccacggcac ctccaacacg ccggaggcca tcacgtcaa ctgcgccaac 360
 aacctgcct gccagggcgt gcagctcatc aacgtcgaca tcaagtacaa caggtccgac 420
 aacaagacca tgtcggtctg c 441

<210> 4834
 <211> 267
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G2

<400> 4834

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 gaactagcaa ggcttcttgc agaagcactt gcgcgtggcc acgacctgct tgcactcgcc 120

accgggaaag ctctccttca tgcacacatc ggtcttgcta attgttgatg ggtgcttcat 180
 taatttgatt tgatgggtct catgggtacg agaaacaaaa ctacttttga taaaatgcag 240
 ggcatgaaaa gcgtttctgc agtcctt 267

<210> 4835
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-015-Q1-E1-G3
 <400> 4835

ttcccgggta gaccacgcg tccgagcagc acagcaagga ggagagcgcc tgggccagat 60
 cgccgccatc gccatactcg cactcaccgg agtgggtcgt gcgaaaattg gccgccgggc 120
 aattacgcgg tgactccaga cgggtgagcg gatcgtcgtt tgggcgatta gaccttcgtg 180
 ccaccgaaat cgcgagctgc aagaagaatc cgcggtcagt tcgtcgagct ctgcgggcgc 240
 catcatctcg ggttcctcac cggcgagcgg tgaggtcacg aggatctgaa gaatcactct 300
 ggtaactgga atctcaagtg ccaggtcaag aacaggtacc acaagatgag gcacatggag 360
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 ggaccgttgt 430

<210> 4836
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-015-Q1-E1-G4
 <400> 4836

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 cgggtgggcca gcgaccccg cgcgggccggc gaggccaatc agcgggttcca gcggatccag 180
 gaggcactact ccgttctgtc ggacaagggg aagaaggcca tgtacgacgc cgggctcttc 240
 gacccctcgc acgacgacga ccaggatttc tccgacttca tgcaggagat gctgggtgatg 300
 atggatagcg tgaaaaacga gaagccggac acgctggagg acctgcagaa gatgctggag 360

gacatcgtga agggcgacgg cggnggcggg ag

392

<210> 4837

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G5

<400> 4837

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gccagctcgc gaaaataatg aagagccgca gcatggcatc atcggccgcy ctcttggtgc 120

tagccctcgc gctagtggcg gccaccgcc cacaggtagc ggaggcaaag aagaagagag 180

cggcggagag cggcgaggcg gcgaggcgga agaagatcca ggacgacttc tgctcgacgc 240

tgtgcgaggg caagaagggg acggacctgg tcgtgtgcaa ggagtcctgc gcgctctccc 300

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<210> 4838

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G6

<400> 4838

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tgacccaaag ctacatgacc acctagaaac tcttggcgga ggtgactacc tttttgcgtt 180

ccgaatgttc atggtgctat ttaggcgtga agtatcattt ggagactcct tatacctctg 240

ggagatgatg tgggctctag aatacgacct tgacattttc ttcgcaacat gcgaagaaca 300

aggtgcagta cataaaaaata aagtttctaa atccaaactg aaaggactgc gccatttttg 360

caagtgggat 370

<210> 4839

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G7

<400> 4839

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gttggtgttg cgcaggcggg agtggagttg gtgcctgctg atgataatat cgccgccgcc 180
gctgctggca cggcgggtgga cgatggcgag ccgcctcagc agtgcgcgac cccggtgagc 240
gtggaggagg cgtgccgcgg cgcgtccgag acgcacgccg gcgtggccta cgaccactgc 300
atggcgctcg tgggcgccga cccgcgcagc aaggaggccg gcaacaagaa catgcacggg 360
ctggcggtgc tggccaccag ga 382

<210> 4840

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G9

<400> 4840

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tattagattt gagcaagaca gcagtggagg ccatcccgaa atccattggt aacttggtac 120
atttaaggta cctcaatctt gatggggctc aggtcagaga cataccttct tccattggat 180
ttctcataaa cttgcagacc ttgagccttc aagggttgcca aagcttgagc agacttcctc 240
gggccatcag ggcattgcta gagcttagat gcctttgtct ctatggaact tccctaagct 300
atgtaccaa ggggtgttgg aaattgaagc atctcaatca tctagatggt ctaatcattg 360
gtcatgacaa caatgcgcct gagggttgtg acttagatga ccttaaagca ttgtcagaac 420
ta 422

<210> 4841

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H1

<400> 4841

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cccaccacat ccggccagcc caacgaaaat gtcgcgcgcc acagctgcgg tcctctteta	120
catcctcgcc gtcgctgccc tcagcgcggc cgaggcaccg gcagagtcac cgaaggcagg	180
cagtcccgcc aaggcaccgg ccgagtcacc gaaggcaggc agtcctgcag ctctgcca	240
ggcacccgag tctgctgcca cgagaactgc ccccgctaag gcacctcaag ccgcctccac	300
ccccgcggtt gccgctgccc catcgctgctc gtcgtctagg aagtctggtc cagctgccgc	360
gccgaccacc gccgccteta caccgtcttc ttccacggac gaggagtga gccctt	416

<210> 4842

<211> 414

<212> DNA

<213> Zea mays

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<400> 4842

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catgggtgcgg tcctcccaaa gtccccccag gcaagaacat cacggccacc tatggcaagg	120
actggctgga cgctaaagcg acatggtatg gcaagccgac gggtgccggt cccgacgata	180
acgggtggcgg ctgcgggtac aaggacgtga acaagcccc cttcaatagc atgggcgcat	240
gcggcaacat ccccatcttc aaggatggtc tgggttgtgg gtccctgcttc gagatcaagt	300
gcgataagcc tgtggagtgc tccggcaagc ccgtgggtgt gcacatcacg gacatgaact	360
atgagcctat cgcggcgtac cacttcgatt tagcaggcac ggcgttcggc gccca	414

<210> 4843

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H11

<400> 4843

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accaccatca cctccaccga tgattaaatc accgccacca ccggtgccgg tgaggtcacc	120
tccatcgtea gtgaaatcac cgctccttc accactgtta agttcgccgc cgccaccagc	180

gcccgtagg tcacctccac cgctaacgaa attatcacct cctccaccac cgataaggct 240
 gccacccccca ccacaagcaa actcacctcc tccatcagct ccaataagct cacctcctcc 300
 tccgatgcaa tccccctccac cgcttgcctc agtcagctca ccaccaccac ctataaaatc 360
 accaccacct gtaaaatcac ctctccacc ggctccagtt agctcaccac cgctcctgt 420
 gaaatactct tcaccaccta ctccagtcaa ctcac 455

<210> 4844
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H12

<400> 4844
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 actacctcgg ggagcagttc tacatcagcg tcatctcgcc ggcgcggtcg ctgcgcgacg 120
 agtacaacat gcccgacaac gccctccgct gcggcaaggt cgtggggctg ccgctgccgc 180
 catcctacgc ccccgcgcg ctaaagacgac gaaggcgccg ttttcacctc gtgttctgac 240
 catccagtct aactaatcca ttcctgtgct gctcggcgaa ataaaatcat caaaaagaac 300
 aaagacgaag gaagcctagg gaagggagaa gggacgttgg gtgggggtga gccaaatgag 360
 aacgcacgga tatatctatt gatgtaatct tgagatgccc tctcaaatca ctgtaatggg 420
 gtttaaaaaa caatca 436

<210> 4845
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H2

<400> 4845
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 gattccggcg acgaccttcg ccgtcatctt atccgtcctc ttctgtgccg cggtggcac 180
 cgccgtcgac aacgacctcc ccgactacgt catccagggc cgcgtctatt gcgacacctg 240

ctcactga

368

<210> 4848
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H6

<400> 4848

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gccgtgctag cggtggccgc ggatgtcgcc aacgccggcc acgccaagcc cctgacgcct 120
ggcgggcgcg tggtacacca caaccacggc aagttcacgg ccggggccgtg gaaacccgcc 180
cacgcgacct tctacggcgg gcgggacggg tccggcacca cggcgggcgc gtgcgggtac 240
aaggacacgc gcgcgcaggg gtatggcggtg cagacgggtg ccgtgagcac ggtgctgttc 300
ggcgacggcg cggcctgcgg cgggtgctac gaggtgcgct gcgtggacag cccacagcggg 360
tgcaagccca gcgcggcggc gctgggtggtg acggcgaccg acctgtgccc gcccaacgac 420
cagcagtccg cggacagcgg cgggtggtgc aac 453

<210> 4849
<211> 358
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H7

<400> 4849

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tggaaggcca acaccgccta caccgcaaaa taattaactt tagtgctgac aatacttta 120
gccgacctat gctagctata ctagattggg ttggatccca agcaatgcat tacacatgca 180
tgcattggac cgtgatatct atttgctacc actaccctat tacgacagtg atgctggcgc 240
caacaatgat ggtgtcatcc tccttctcca tcttcttcat ctccatatat agctagagt 300
agacttcgct gttgttttaa agagaagagt taagaaatgg attgacaagt tatataat 358

<210> 4850
<211> 431

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-H8

 <400> 4850

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 gacggcgctct ccgtgatggg gtccagcgat atctggatcg accacctgtc catgagcagc 120
 tgcgcggacg ggctggtgga cgcggtggac ggctccaccg ccatcaccgt ctccaacggc 180
 cacttcacga ggcaçgacca cgttatgctg ttcggggcca gcgacgccgc gtccaaggac 240
 agggagatgc aggtcaccgt cgccttcaac cacttcggca aggggctggt gcagcggatg 300
 ccgcgctgcc gtcacggctt cttccacgtg gtgaacaacg actacacgca ctggctcatg 360
 tacgccatcg gcggcagccg gaaccccacc atcatcagcc agggcaaccg ctttcgcgcc 420
 gtcgacgaca g 431

<210> 4851
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-H9

 <400> 4851

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 ctccagcaag gcgtcggagc cggggatctc ctgctgctcg gtgctggctg gagtcgtgca 180
 gaccgacccc cgctgcctct gcatggctct ggacggcacc gccacgtcct tcggcatcgc 240
 catcaaccag accagggcac tggagctccc cggcgtctgc aaggtaagg cgccgccgct 300
 cagccagtgc acaggcatgt catgtgtcag gtcacgttc aaatgcaaac cattgccagt 360
 ttctgttgcc gcttagaatc ctagtacgta cctgggtctca ggcgtccctg cggcacctgc 420
 accga 425

<210> 4852
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A1

<400> 4852

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catcagcggc accaccatcg cgcgcggcga cgactgcgtc tccatcggcc ccgggagcaa 180
gaccatccgc gtgaagggcg tcaagtgcgg cccgggccac ggcacgcgcg tcggcagcct 240
ggggcggtac aaggacgaga aggacgtgga ggacgtgaag gtgacggggt gcacgctcgc 300
cggcaccacc aacggcctgc gcatcaagtc gtacgaggac tccaagtcgt cgctcaaggc 360
caccaagttc ctg 373

<210> 4853

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A11

<400> 4853

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catgtctttc accggcacgc aggacaagtg cacggcgtgc gacaagaccg tccacttcat 120
cgacctctc acggccgacg ggcgccatcta ccataagaca tgcttcaagt gcagccactg 180
caaaggggtc ctctcgatgt gcagctactc ctccatggac ggtgtgctgt actgcaagac 240
ccacttcgag cagctcttca aggagaccgg gagcttctcc aagaacttca cgccagggtg 300
caagtcatca gacaaggggtg aactgacaag ggccccaagc aagctgtcgt ctgcattttc 360
tggtacccag gataagtgcg cagcatgcc aaaaacagtg taccgctgg agaagttaac 420
tctgg 425

<210> 4854

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A12

<400> 4854

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 gcctcgagga tategacgcg tgctccgccg agtgcgaggt ccacatcgcg caggagtggc 180
 tcgacaagct gccgccaccg tcttacgagg agcgggtacgt gtcacgcgc gcgtccagga 240
 accgcgagct caacaagcac gcgcgcctgg gttgccaggt cgtcctcacg ccggagctgc 300
 atggcatggt cgtcgctgtc cccgagccta agccgtggga catcccgtaa tggcctgccg 360
 cgacgaatgg caaggtgcgg ctttcgacgc tgtgagcctt ccttcattcc cctggctcgg 420
 tcaagcttgt gcgcct 436

<210> 4855
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-016-Q1-E1-A3
 <400> 4855

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 aggcggtgcta cccgccgggg gcagcgggcg gcggcaagta cccgtacatg acggagaacc 180
 cgcagctgcg gtgggccttc atccgcaagg tgtacgtgat cgtgtgcctg cagctgctgc 240
 tgacggtggc cgtcgccgcg acggtgaacc tgggtgcgcgc catcggggac ttcttctct 300
 cccgcaccat gggcgccatg ttcgccatca tcggcgatcat cgtcgcccc atcctcgtga 360
 tgatcccgat gatcatttac cg 382

<210> 4856
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-016-Q1-E1-A6
 <400> 4856

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ggcgccgacg cggctctctg cactgccatc cctagcgtaa caataagcct agaggagaaa 180
 gaaaatatca atggggatgt tcccacgac acctcggccg caagcaacga ggaggaggcg 240
 ttgttcagtg tcggagaatc caccaaggac gatggccatc gcttgacgat ggaatgcacc 300
 actcccgtct cctccagtag cccttcact cgcaagaagc gcggggcggt cagcctcttc 360
 agggcgatgt tctgtcctt cggccggagc gacgacagca tgaagaagac agacgacgac 420
 accacgagcc cca 433

<210> 4857
 <211> 115
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A8

<400> 4857
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 tcggctcctt ctttgctttt gtgagctccc tgtgtcgtg ggtgtgtgtg ctgcc 115

<210> 4858
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A9

<400> 4858
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 atcaaccttg cctaccgca cgcaagaggc agcgatccgt atgtcgtcct acgacttggc 180
 aagaagaaac ttaagacgag cgtgaagaag agatctgtga acccatctg gcacgaggag 240
 ctaactctga ccgtcacaga tcccagccta gctctgaagc tggaggtgtt cgacaaggac 300
 acgttcagca gggacgacc gatgggggac gcggagatcg acgtggcgcc gctggtggag 360
 gcggcgaacg cgagcccga ggcgagcctg aggaacggcg ccatcatcct gt 412

<210> 4859
 <211> 405

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-B1

 <400> 4859

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 gagggggtca acaagctggc tgaagccttc gacgtcgcgc tggggccgct cctcgccggc 180
 ctcgccgaca agctgccggg gctgacctac tcgctggcca actccttcg cctgacgcag 240
 gacgccttcg cggacccgaa ggcgtcaggg tacagcgacg tggccagcgc ctgctgcggg 300
 agcggggcggc tgctggcgga ggcggactgc ctgcccaact ccaccgtgtg cagcgaccac 360
 gacagccaag tgttctggga ccgctaccac ccggcccagc gcgcg 405

<210> 4860
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-B11

 <400> 4860

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 tgagaagaat acatgacacc cgtgtcaact aaccgcatca ttttttagtt gatggttctt 180
 atgccatgga aattcaacgg atgttacagc cttttcgtaa tagatcatgt taaaaagcac 240
 gtgactttta tcgactttac accgacccaa gattggtata agcacatgcc atacaagagg 300
 ttcgcagaag cgattatcat ggccttaaag aaatataaga ttacctacag caagaaatgt 360
 tctggatggg aagaggatat ttttaagtga aaacatacaa tttggaatgg tgttccaagt 420
 gacttaagag agt 433

<210> 4861
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-B12

<400> 4861

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tcctcaatgc atttgcggtt ttttcagtcg acattgcttc aataggacat agcatttcat 180
taaagtttgc agggcatcgt agaacgagaa tggttctccc ttcaaaaagc aaaacacggg 240
aaactcgat agtcgatcga cgaccatgca tcacatttcc ttttctcga tcatcgctta 300
tttccgcgga aaacaacgaa ggaaacccaa ccaaggaaac gcatgctatt gcttaagcat 360
cgccggagga gctggtcgat cgctcgctca ctcaggggcc tgattgttcc ggtcacctgt 420
cgtcgctgctc gagctgagac acgc 444
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<210> 4862

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B2

<400> 4862

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tgcacggccg cctctattgc cgtcgcctgg ggcttctgct gcgttaccat gggccaaaca 120
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ccctggtggc cggggaatcc ttcacctgcg gggtgctaca tcgccgggct gctgcatcgt 240
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ctctgaaggc cgtctgtccc tgttccttcc gaacgttggg gattatgata ctggggcgcc 360
taatcgctgt cgccggtgag attcggccgc cagattccaa ggcgccgccg ggctg 415
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<210> 4863

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B3

<400> 4863

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 atggttggtc attggtgttt gtatatacta tcgtcgcgcc gccgcctcct cctccgtcat 180
 cgtccgaccc caccgtccaa cggcatggcg gccggccgcg acgacgtcaa tgcattggtgt 240
 gcgatcgagc caggccagct gcgtgcccc tgcccagcca gccagcaggc agatcagacc 300
 gccggccgcc gccttggcgc tcagttcaag ctgcg 335

<210> 4864

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B5

<400> 4864

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 tgctgtgcc tcgtctcgc cgcgccacg ctggcgctgg cccacggggc gcaaggagga 180
 ggaccatcgg catcgggcg gcacctggac aaggtcacgg ccgagacctt cttggacatc 240
 gagatcgacg gcaagcctgc aggccggatc gtgctgggac tgtttgggga caccgttcct 300
 aaaacagcag agaacttccg agcactttgc acaggggaga aaggaattgc cacgtccggc 360
 aagcctctgt ggtacaaagg gtcgacgttc cacaggatca tcccgggggt catgatc 417

<210> 4865

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B6

<400> 4865

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 tacgatgctt ctggtatcag attgcatgct ggaaagcaag cagcggtact gaaccaaata 180
 gtttgtgaac ttccttctga acatcccttg tctgaaacaa gaccactgcg agaactttta 240

ggccatacac caaccaggt tgttgctggc gcattgcttg ggtgtacgat agccacagca 300
 ggacaattat tcgtttgaac tccgaagggtg caggagaaat gttgtagcat ttgcatcgcg 360
 gggacttgag aagaagtttc tctagtgttc tgctacttta ggtattggta agattttcaa 420
 cttggtgctg tagtgttgct caat 444

<210> 4866

<211> 425

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-020-Q1-E1-H2

<400> 4866

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 aagccgccgt ctccacaccc aaggttgctc ccgaagccac tccaatctcc gttgaggttg 180
 cggctgatga acaggtagct gagaagggtg tggtggagga gccggctgcg gcggccgacg 240
 ttgagcatca gaaggctaata gaggtgctcg ctccagaggc ggccgtcgcc gagccccgacc 300
 acaaggagga ngaagccgtg gagaagaccg tcgtcgagga ggagaagcca gcggcagcag 360
 cccatgcaga ngaaaagggtc gcccacgccg ccgagaacac gacgacggtg gaggcgaaga 420
 agaac 425

<210> 4867

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-H3

<400> 4867

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 cacggcacca tcgacgggca aggagccctg gtgtggagca agaaccagtg ccagcattct 120
 tacaattgca agatcctccc gaatagcttg gtgctggatt ttgtgacgaa cgtccagatc 180
 cgcgcatca cgctgctcaa cagcaagttc ttccacctca acatcttcga gtgcaagaac 240
 gtgctgatcg acaaagtgc ggtcaaggcc cccggcgaca gcccacacac ggacggcatc 300

cacatcggcg actccagcaa cgtgaccatc agcagcacca ccatcggcgt cggcgacgac 360
 tgcattctcca tcggccccgg gagcaagat 389

<210> 4868
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-H5

<400> 4868

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 gagtggcacc gtgttcaggc cacagaggac atgtctgccg cacgggctgc agcggaggta 180
 ggtgctttct ctcaggccgt ggcaatcctg gaagcccgtg ggaggatact ggaagcacia 240
 gcagcacaat cttcagacga ccagttcctg gcattgatgg cggagctgac ggagatgcag 300
 cagagagtgg agaaccggcg gaagtacgag gagttaggca gagctttcat gctggcaggc 360
 ctgagctcag actcatggca gagagcatct gcacgagggg actcatcaga gatcactacc 420
 actattcata cctaccagac g 441

<210> 4869
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-H6

<400> 4869

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 gcatgactat caccctcgag gtggagtcgt ctgacacat tgacaacgtt aaggcgaaga 180
 tccaggacia cgagggcatc cccccagacc agcagcggct catctttgct ggcaaacagc 240
 ttgaggacgg gcgcacgctt gctgactaca acatccacia ggagagcacc ctccaccttg 300
 tgctccgtct caggggaggc atgcagatct ttgtgaaaac cctgaccggc aagactatca 360
 ccctcgacgt ggagtcctct gacaccattg acaacgtcaa aggccaag 408

<210> 4870
 <211> 325
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-H7

<400> 4870

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ccgcttcaag atgcatatct ttgtaaaaac cctgactggc aagactatca ccctcgaggt 120
ggagtcgtct gacaccattg acaacgttaa agccaagatc caggacaatg agggcatccc 180
cccagatgaa cagcggctca actttgctgg aaaacagctt gatgacggac gcacgcttgc 240
tgactacaac atccacaagg tgagcaccct ccaccttggt ctccgatctc aagggacgca 300
tgcatatctt tgtgaaaacc ctgac 325
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<210> 4871
 <211> 433
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-H8

<400> 4871

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ctccccctag gggatcgctg gagaggaatc gcaaagaggg ccgtctcatc cgagttaagg 120
aagccatgga gcacaaggag gctgggtgcc agggccccga gggacccatc ctctgcatca 180
ataactgtgg cttcttcggc agcgcggcga ccatgaacat gtgctccaag tgccacaagg 240
agatgataac gaagcaggat caggccaagc tggctgcctc ctctatcgac agcatcgtga 300
acggcagcga cgccgtcatg gagccggttg ttgctggcag caacacggta gtagctgttg 360
cccaagttga gttgcanaca atgaacgtgc agcagcccgc tgatgttgcc ggacccagcg 420
aggggggtggc ggc 433
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<210> 4872
 <211> 104
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A10

<400> 4872

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agaagggagg gcacaatatc tcctttacat gcgccgatgg tcca 104

<210> 4873

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A11

<400> 4873

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cctccccaâa tcggaccgct ttgcttgatt gtgagggcgg ctagggtcgc ccgagactgc 120

tattcgtgct cacaggcctt cgatggggcg tgtggccggg aattgctcgc cggggatcgt 180

cttcgccgag aagccgctcc gtctcgtggt taggcttgcc atcaattcaa tcacagcagt 240

gtggacacga ggatctgaag aatcaccctg gttactggaa tctcaagtgc taggagaaga 300

acaggtggtt caagaggagc cacatatcga ggagttcgat tcgatctagg tggcgtctcc 360

cacttgactt tctggcgcca atgatggatt ttagatcctt ttatatattat cttttatttt 420

gtaagact 428

<210> 4874

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A12

<400> 4874

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ccggccaaca actcagccgc cgcaaccgcc acatcagcca tgggcgcctg cgcaaccaag 120

cccaagacgc ttgaggggca ggccccagct gaggccgccg tctccacacc caaggttgcg 180

cccagggcca ctccaatctc cgttgaggtt gcggctgatg aacaggtagc tgagaaggtg 240

gtggtggagg agccggctgc ggcgcccgac gttgagcatc agaaggctaa tgaggtggtc 300
gctccagagg cggccgtcgc cgagcccgat cacaaggagg aggaagccgt ggagaagacc 360
gtcgtcgagg aggagaagcc agcggcagcc gccaatgcag aggaaaatgt cgccaccgcc 420
gccgagacca cgacga 436

<210> 4875
<211> 289
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A2

<400> 4875

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ctctccgagt aggtcatcca aggccgcgtc tattgcgaga tctgctgcgc ctggttcgtg 120
accattgtca ccgagtacat cacggagcgc agtgtgacgc gcgagtgcac gcacatcagt 180
acctggatgc cccatcgctc cagcgacggc gtgacagatc ggaaaggtag gtgaacgacg 240
tcactcctag acacacagga tgacgacatc tgcgaagtgg tcctggcgg 289

<210> 4876
<211> 290
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A4

<400> 4876

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ttcctttgta ccctggctca aggcaagtaa ttacctggaa acccggttgg tggggcttct 120
ctcagatatt atccctcctt gtagcaactt ccaagaactc gtccattgat tcatttggtg 180
tcttgtagca aacatttggt ccaacatgtg tcatagatat tttcaatggg ttaatttcta 240
ataaaactat gtttacaagc aacaacatgc aatcgtgacg gtgatcagag 290

<210> 4877
<211> 76
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A5

<400> 4877

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caaaattaaa ttaacg 76

<210> 4878

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A7

<400> 4878

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aagatcgctt gcgccgtcct cgtcgccgcc tcggccaccg tggcgctggc cgcggaggcg 180

ccggctccgt ctcccaccag cggctcctcc gcggtcgac ccgccatcgt cggggccgcc 240

gtggcctcct tcttcgcgta ctacattcac tgagccgccg gacgaggagc cggagccgga 300

gggaagagac caaggtgggg ggagagactt ggctgcgctg cgctgctctg ctgctcccg 360

gcattcccg tgcgtgggcg tgct 384

<210> 4879

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A8

<400> 4879

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cgccgccgtc tctacggtcg ctaataaacc gcggcatcca gggatggaga tgaccaagat 120

cgctgcgcc gtcgtcgtcg ccgctcggg caccgtggcg ctggccgcgg aggcgccggc 180

tccgtctccc accagcggct cctccgcggc cgcagccgcc atcgtcaggc ccgccgtggc 240

ctccttcttc gcgtactaca ttactgatc cgccggacga ggagccggag ccggagggaa 300

cagaccatag tgtggggaga gacttggtg cgctgcgctg ct 342

<210> 4880
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B10

<400> 4880

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tcagcagttc cttcagcccc aactccagat gttgctgaag cacaggcccc agttgctgag  180
gaggacgacg acgatgatgt tgaccttttt ggtgaggaga ccgaagatga gaagaaggct  240
gctgaagagc gtgctgcagc tgccaaggct tctggcaaga agaaagaatc tgggaagtca  300
tcagttttac ttgatgtgaa gccatgggac gatgagactg acatggccaa gctcgaggaa  360
gctgttagga gtgtccagat ggaagggtcg ctctggggcg catccaagct tgtcccagtt  420
ggatatggta tcaagaagct gca                                           443
  
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<210> 4881
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B12

<400> 4881

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ccgtcaaccc gctggttgcc ggcatctgct ctgcgcgccc attcccagag gtttgcacgg  180
ccacagccgg gcgccatgca tccaagtacc cggtcatcga caatttggcc gtgctgaaca  240
tgcaggtggc cgcgttcgcc aagcgcacag cgcaggcgcg gaagcacgtc gcggtggcgg  300
cccgactat tccaccgcc caggcacagg cctcaggac ctgcgacacg atgtacatga  360
acacgcagga cgccatcggc gcggcacagc gagccatcgc gttcaaggac ac           412
  
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<210> 4882
 <211> 394
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-B3

<400> 4882

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atggacggat tggtaggcct cttgaaagtc cgggtggtga ggggcatcaa ccttgccctac 180

cgcgacgcaa gaggcagcga tccgtatgtc gtcctacgac ttggcaagaa gaaacttaag 240

acgagcgtga agaagagatc tgtgaacccc atctggcacg aggagctaac tctgaccgtc 300

acagatccca gcctagctct gaagctggag gtgttcgaca aggacacgtt cagcanggac 360

gacccgatgg gggacgcgga gatcgacgtg gcgc 394

<210> 4883

<211> 389

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-B4

<400> 4883

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atgttcgtcc ccatccaagc cgttctcccc ccggatgcc aatgggcctta caaaagggtac 120

cttctccaat ccggaaaatg gtttaagcaa aacgttccca accaagaagg aatagccctt 180

ccccaaagcca atcttcggcc ttgactgggc ggggtccgaac tcaccgacta actaatgaag 240

attctgactg agcgcgggcta ctcttcanc aacaccgctg agccgggaaa tcgtgaggga 300

catgaaggag aagctcgctt acatcgccct ggactacgaa caggagatgg agaccgcca 360

gaccagctct tccgtggaga agagctacg 389

<210> 4884

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B5

<400> 4884

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cgtggcgctc gccgcggagg ctccggctcc gggccccacc agcgggtcct ccgccgtcgc 120
gcccgcgctc ggcgccgccc tcggggccgc cgtcgcctcc ttcttcgcct actacattca 180
gtgagccggc cgcgggccggt cgcccggagg ccgaggaaga gacgaagcgg gagagagagt 240
gacatggctg cgcgcatctc gatgcgtggg catgtttttg attcgacaca ctttttgtcc 300
tctttttctt tgttccctct ttctccttaa tttaacgaat tgatgcatgc cgctgatgtt 360
cttccccctg agagagggat taacac 386

<210> 4885

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B6

<400> 4885

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ctgctacgag aggaggagga tatatactag tatatagcta gagcaattat tagctggctg 180
taagcatgaa tcgattggac atgatagaca acatcgacgg ccgtcgggta accaagaaca 240
aggcgcgcat ccaagttggc gactcctctt cgtcggacga aagcgacagg gagaaggagg 300
aagatgaaga agaagcacat gaggaagtgg ccaaggcgcc cccgttgggt tggaatcatc 360
acaatcacca cg 372

<210> 4886

<211> 381

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-B7

<400> 4886

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tgaccaaggc aggtttgggc gtgctggcct tcaactcggg cctcgccatc tacaactcct 180
 ggggcgacgc gagctccgtc gcgttcgtgc tctccgcgga ctccatcctc gtgctgctct 240
 tcctctgcct ccgtgagctg gagctgcagg ggcggccggg ggccgcccgc aggggcaggg 300
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 cgtctanggt ggcgccgctg a 381

<210> 4887
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B8

<400> 4887

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 ccgacctctt cggcgacaac cagggctacc gcgagctgtc ggagctcgcc gagcaggcgg 180
 ccaagcgcg cagaggtggcc aggtcaggg agctgcacac gctcaaggga cacgtcgagt 240
 ccgtcgtcaa gctcaagggc ctcgacattg acaccattca gcagagctac accgtgtaaa 300
 ctcgactcag tttttttatt tgcttttttt tgcagacaaa taaaaccac acacatatat 360
 atatttggtg aagatcgggc gtattttcat tttcaccggg aagatttgta actgtcctcc 420
 tccctcc 427

<210> 4888
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B9

<400> 4888

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 tctacatgtt catgtcaagt ggaggatgcc aaaaatctgg aactacgatg ccctgtatcc 180
 gaaattctcc aaaatagaga atgtatacat tttcaatgat aagatcctag ccaaacattt 240

ctctttctct gtatagttct tgtcaaagtt tgaagagttt ggagttgaac ctaccttggt 300
gagtggaagg ggattgtggt cagaaaactt tagagatgct ttttagattg ccgggatgta 360
aattgttgcc agctggaagg ccttgacttt taacagtctc aaacaataac atttaagcat 420
ggattacctc ttgcatagta atttcc 446

<210> 4889
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C10

<400> 4889

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ctccgcgtgc gccgtgaacg gcacgggtca cttcgggtata gcggtgctgc tgcccagagac 180
gccgccgcca gcctcggccg tgagggccag gtggtgggcg tggacggtgg gtgtcggcgc 240
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caggatgcgg cgaagggagg agatggatcg gcgggcgatg gccggggagg agctggggag 360
gatgacggtg cgcgggagca ggatgccatc ggcg 394

<210> 4890
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C11

<400> 4890

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tccgcgcaaa caatgctagt tgccgccgcg gccggcgcca agcggcaggc gccggtgatg 120
ttcgtgttcg gcgactcgac gctggacgtc gggaacaaca acttcctgtc gggggcgggc 180
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aggttcagca atggcgacaa cacggctgac ttcgtcgcga agagcatggg gttgaagagt 300
agccctccgc cgtatctgtc gcttgacccc aacgggtcca gccctctgct cgcgcagact 360

gctctcacca ctggtgtcag ctacgcttcc gcagacgctg gcgtcctcga ctcaaccaac 420
gagggcaagt g 431

<210> 4891
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C12

<400> 4891

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agaacaaaag caactaagat gcctatagag ctacaacaag caactgaagt tgtggaacaa 180
gcaaaagcta aggctttgat ggcccattat gaggtggcaa aagctaggga agatgcggat 240
caagttaagt cacaattaaa tgtcattaaa ttgagactag aagcggcatc aagggagata 300
cttgcaagtga atgcatctaa agaaattgca accacctcag caaatgcatt gcaagaatac 360
aaagatgaag cacatataga gcccgaagat gagcagataa gaaataacta tatgac 416

<210> 4892
<211> 385
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-021-Q1-E1-C4

<400> 4892

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catcaagtcg cgatggagat gaagaaggtc gcctgcgccg tcctcgccgc cgccgcctcc 180
gccaccgtgg tcctcgccgc cgaggccccg gcgccccgcc ccaccagcgc ctctcggcc 240
gcgttccccg ccgtcggcgc cgtgctgggc gcctccgtgc tctccttctt cgctactac 300
ctgcagtaaa attaaaggag gatcggaggg agaggctgct ggctgccatt gcctgtantc 360
ggttggattc cgtttatata tatat 385

<210> 4893
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-021-Q1-E1-C5

 <400> 4893

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 ggaaggagaa atggcttccg cacacaacgc tctccgggtg tttttcatcc tagccgtggt 120
 atgtgccgta tgcacagcga aaaggacagg agccaacaag gaagaatcgg cggcagcccc 180
 cgggtggcgt gctggaggca ggcgcgggac gtctgacatc tccaagctcg gcgcgaccag 240
 cgacggcaag acggactgca caaaggcagt ccaggacgcg tggacgtcag cgtgcgaagc 300
 gaccggaagc gccacggtgg tgatccccc aa ggcgactac ctggtcggcc ctctcaactt 360
 cactgggcca tgc 373

<210> 4894
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-021-Q1-E1-C6

 <400> 4894

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 cctgccgcgc gcgcggcggc ggtggcgggtg gcgggagggg cgccgtcgggt gccggcgggt 180
 ccgctggaca tcgcgcagct gggcgccaag ggcgacggca agtcggacag cccccgatg 240
 atcctcaagg cgtggaagaa cgcgtgcgag gcgacggggg tacagaagat cgtcatcccg 300
 ccgggcaact acctgacggg cgggctggag ctgaagggcc cctgcaagtc ctccatcatc 360
 atccgtctcg ac 372

<210> 4895
 <211> 142
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C7

<400> 4895

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agtgccactg ggcgctcgtc gacgtgattc agcacgaaca aactcgcga gactcatcgt 120
gagcgtcatc cggcagcaag tg 142

<210> 4896

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C8

<400> 4896

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gccaaagacac ggccggaacc aagaaggaca gcgcgcagct gcaggagcac ggcgccaccg 180
gcaccgtgga ccaggtggcc caggccggcg agggcgtggc gacaagcgtc agcgacaccg 240
cgtccgccgc cgtcgggtggc gtcattgagca cgggtggtggg cgtggtcggc ggcgtc 296

<210> 4897

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C9

<400> 4897

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ggacaacaat ggcgccgacg cggctctctg cactgccatc cctagcgtaa caataagcct 180
agaggagaaa gaaaatatca atggggatgt tcccacgac acctcggccg caagcaacga 240
ggaggaggcg ttgttcagtg tcggagaatc caccaaggac gatggccatc gcttgacgat 300
ggaatgcacc actcccgtct cctccagtag cccttcact cgcaagaagc gcggggcggt 360
cagcctcttc agggcgatgt tcctgtcctt cggccggagc gacgacagca tgaagaagac 420

agacgacgac ac

432

<210> 4898

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D1

<400> 4898

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agcaagccca cccgttcgac gacatggccc gcctcggcgc cggcgccgtg ttggcgctcc 180

tagtggcggg cgcgggcggg gccgcgttcc tcgcgggtgcc ggcctcggcg aagtccgggg 240

agctgagcgc gatgggggtt ctggcggcga agggcggcag cggcgcgggc ccgcagaagt 300

gctcgggcgc ggtgggcgag tgcgacgtgg acgaggcgga ggagctcggg ctgagcggcg 360

gcggcctcgg ctccgacgac gcggtgcggc ggac 394

<210> 4899

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D10

<400> 4899

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aactgcctca acagctatta ttgtaggtga ccgtttgctt gttgcaaata ttggagattc 120

tagagccgtt atttctaaag gaggacaggc gattgcggtt tcaagggatc acaaacctga 180

tcagacagat gagagacaaa gaattgagga cgcagggggc tttgttatgt gggctgggac 240

atggcgagtg ggtggtgttc ttgctgtctc tcgcgcattt ggtgataaac tcttgaagca 300

gtatgttgtc gctgaccctg aaatcaagga ggaggtggtc gacagctccc ttgaattcct 360

catcctggct agtgatggac tctgggatgt tgtcactaat gaggaagctg ttgc 414

<210> 4900

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D12

<400> 4900

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cggcgccgac atcgaccctg accgcctacc gcaaatacctg tacgaagacg aggaccggga   180
caaggtggtg ctgcgcgcgg acgacgacct cgcggcggcg gtggaacacg ccaggctcgc   240
cggatggaag ggtctgaagc tgttcctgga ctactccggc accaccgggc gcaggaaagc   300
ggtggccacc ccacgtggcg ccatggcggg gggcatgtcc agccgggacg cgtgggcggc   360
ggcgtacagc ggggtcgccg cgggggctgc cctcgtcact ggcacgcggc tc           412

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<210> 4901

<211> 404

<212> DNA

<213> Zea mays

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<400> 4901

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cgtcaaggac accgccggag ccgcgccgga cagcgcgcag ctgcagcagc accgcgccac   180
cggcaccgtt gagcaggtgg cgcatacggg ccacggcgtg gcggcaggcg tcaaggacac   240
ggtggcgggc gcggcggttg gcgtcaccaa cacggtggcg ggcgtggcgg cgggcgtcac   300
gaacacggtg accggcgcgg tggcgggctg cacgaacacc gtgaccggcg cggcggcggg   360
tgtcaaggac accgtgaccg gcggccactg atccacgacc cacc                       404

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<210> 4902

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D3

<400> 4902

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 cgggtgccccaa gtteggcacc tgggacagcg gcgatgccgg gtacacggcc tacttcgaca 180
 aggtgcgcga gaacaagggc gccacggcgc cgccgctgcy ccggccgcgc agccccaacg 240
 accccgaccc cgaccgcgag cccgagccag aggagggggc aatgaggaga gtccccccgc 300
 cgtcgtcgtc gagggccggc accgcaggag gccaccgcga gccgccgccg ccggggcggc 360
 gccacgggca gagccacggc gaa 383

<210> 4903
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-D4
 <400> 4903

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 gggcaaccaa ccgttggcaa caagaccaat aataaacccc tcctcctcct cggccttgcy 120
 ttcggcccc cttgtgccgg ccccgccgc gcacaaagccc cccggcgggg cttcaacaac 180
 tgggttggca ataaacaagc agagctacgc cctgtacgc caaaaagtcc gtcggggacg 240
 ggggcaagga gcccttgac aagaagctgt cggaggcgga gaagaagaag gtcacgtacg 300
 tgggtgaccc cagcggcaag ggcgactaca ccaacatcac cgcggcgctg gaggatatcc 360
 cgggtgagcaa acacaagcgc gtgatcctgg atctcaagcc cggcgctcat t 411

<210> 4904
 <211> 380
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-D5
 <400> 4904

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 ccagcagggt cagccgttcc tgttcttgct aaaacgagag aaggatggca gtgtctcagg 120
 gagctgtcct attcttgttt ctctcgtcg cagcagaggt gggaaccatc gatgccaaaa 180

ggactgcgac ca

432

<210> 4907

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D9

<400> 4907

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tcccgcgcc gccgtctcta cggtcgctaa taagccgccg catccaggga tggagatgaa 120

gaagatcgcc tgcgcggtcc tcgtcgccgc ctcgccacc gtggcgctgg tcgcggaggc 180

gccggctccg tctcccaaca gcggctctc cgcggtcgca cccgccatcg tcggggccgc 240

cgtggcctcc atcttcgct actacattca ctgagccgcc ggacgacgag ccggagccgg 300

agggaagaga ccaaggtggg gggagagact tggctgcgt gcgctgctct gcggctcccg 360

cgcac 365

<210> 4908

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E1

<400> 4908

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tggaggtgga gtcccccaag aaaggagcgg cgccggtgcc agagcccatc gtcgttgctc 120

ccgcagtgga ggacgtggtg gcggacaagt tcgtggcggt ggtgaaggag gcgatcaaga 180

agccggagat ggacgagaag gaggtggcga tgcggagatt cctgggcagc cgggtgaaga 240

cagcgatgga gccgcggtca gagtcggagc agccgcggcg ccgggaggtg gctcggagca 300

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<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E10

<400> 4909

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atccagggcc acgacatgaa gctcgtggag ctggagggtc cacataccct gcaggacgtg 180
tacgactcgc tggacgtgca cgtcggccac tgcctctccg tgctggtcga cgccgaccag 240
gcgcccggcg actactacat ggtggcctcc acgcggttca tcacagacgc caagtccgcc 300
tccgccgtca tccgctacgc cggtccagc ggcgccccgc cggcgcccaa catgaccgag 360
ccaccggccg gctgggcctg gtccatcaac caggccaggt cgttccgctg gaac 414

<210> 4910

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E11

<400> 4910

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gctccaagga ggccgtggcc accggcaaca ccagcgccgg cagcaaggtc ctccggagga 180
agccctcctc cgtctccacc ggcgcaagcc acacatccac cacgtcgccg tcgtcctccg 240
gcgtcgtcgt caaggacgtc gtgaaggatg cggcgggcgc cggcgagggtg atgacgcccg 300
ccgacgccga gaagcctatc tctgtcgacc ccaaggcaga cgccatcgtg gtgatggacg 360
ccaagaaaga ggagggcaac aacaaggtgg ccgtggagga ggatctgc 408

<210> 4911

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E12

<400> 4911

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ggcgtcgacg tgttccgcct gctgtggcgc accgcgttcg tcgcgctcat caccctgtgc 120
gccgtcctgc tgcccttctt caacagcatc ctgggaatcc tcggcagcat cggcttctgg 180
ccgctcaccg tcttcttccc cgtcgagatg tacatccgcc agcagcagat cccgcggttc 240
agcgccacgt ggctggcgct gcaggccctc agcatcttct gcttcgtcat caccgtcgcg 300
gccggggctg cctcggtaca gggcgtgcgc gactcgctca aaacctacgt gcccttccag 360
accaggtcgt gatgagcact gcacgtacgg tcccatatgt agtcaaaaa cttaa 415

<210> 4912

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E3

<400> 4912

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gcacgcgctg gcgctgttcg tgggcgtgtc cgtcgcgggc aacatctcgg gcggccacct 180
gaacccggcc gtgacgttcg ggctggccgt gggcggccac atcaccatcc tgacgggcgt 240
cttctactgg gtggcccagc tgctgggcgc caccgtggcg tgctgttcc tcgggttcgt 300
caccacggc aagcccatcc cgacgcacgc cgtcgcgggc atcagcgagc tggagggcgt 360
cgtgttcgag gtcgtcatca ccttcgcgct cgtctacacc gtgtacgcca acgcgccgaa 420
cccaagaag 429

<210> 4913

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E5

<400> 4913

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aatgcagagg cagctgagcg tctcctcgat gcccaagctc ctgccggagg aagccgcctt 180

cggcggcgac gacgacgacg tcgaggccaa gcccgagaag gcgccggccc cgcggccgtc 240
 ggggaaggag cggtcggtgc acctcgtaac gctcatcgtc gtgctctgct tcctgtcctt 300
 ctctctctgc tcccacgccc cctctccctc tgacatgtcc agttttggga a 351

<210> 4914

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E6

<400> 4914

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 cgtgtcctgg aggtcaccct ggtgtcggca aatgacctca agaaagtgtc gctcttctcc 180
 cggactcgca tctacgccgt ggcttccatc tccggattcg acctccgcat cccttcccac 240
 agcacccaag cagaccacag caacggctgc aacctctgct ggaacgccgt ggtacacttc 300
 cccatcccgg ctgccgctga caccgcggc ctcgcactcc acgtgaggct ccgcgcccag 360
 cgtctatacc tgggcgatcg cgacatcggc gaagtggttt gtgccatcca cgacctctg 420
 gccggggccg acaaggggtg 439

<210> 4915

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E7

<400> 4915

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 agagcaatgt tccttcatta aagaaccttc ctccaattgt tcatcatgaa acattcttca 180
 gcaatgttca gaatgactac aatcaaacag gattagtgcc tttggaggga tgttctgcc 240
 gtgaggcttc acagcttctc agtgatcgct ggactgctgc aatcaacatg tacaatgacc 300
 aaacaattga cccctcagag aaaccggtaa tgtattctgg atctagcagc tcatcatggg 360

gtc

363

<210> 4916
<211> 437
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-021-Q1-E1-E8

<400> 4916

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gccgagtccg tgctgacggc ctcccatctc accttcgaga acatcaggat ggaggaggatg 180
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tccacgcccg aggccatcag cctgctctgc tcggagacgc agccatgcag cggcgtctcc 360
ctcatcgatg tcaacgtgga gtacgccggc aagaacaaca naaccatggc cgtctgcagc 420
aacgccaagg ggcacgc 437

<210> 4917
<211> 362
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F1

<400> 4917

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tggtccttcg tggagcggcc cggegcgtg ctggtgatcg ccttcctggc ggcgcagctg 180
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tggggctggg ggggcgccat ctgggcgttc agcgtcgtca cctacttccc gctggacgtg 300
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ac 362

<210> 4918
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-D7

 <400> 4918

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 agaggggtgct tcgcacgtgc atgtgagatc gggcgatccc gatcgtcggc cggcgcgaat 180
 tgaactaacg acgacgtacg tgcgaccggg ccgggcgttg gattattccg gcctgagcaa 240
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 gcgcggcggc ggcgggcggc aacgcgggcg ccgtggcgcc gcaggtcctg gagcgtctcc 360
 ctggcggcgg cgacgacgac tgcaacgtgt cgtacacgca ggacctccac gtgttccacg 420
 tcaagcgc 428

<210> 4919
 <211> 363
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-D9

 <400> 4919

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 cgcagagatg gcggttctcg tgcaggaaat gctgcatcca gatctctcat ttgtgcatca 180
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 tggagaaacc ctgcgttcag gtaccctggg cactccatgg agacgctcac gtcacaagct 300
 tgatggcaaa gtcacaactc tagcttttgc gaatttcagt gaagagctta tgggtgctcaa 360
 ctc 363

<210> 4920
 <211> 354
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-E1

<400> 4920

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tagccctcgc gctagtggcg gccaccgccc cacaggtagc ggaggcaaag aagaagagag 180
cggcggagag cggcgaggcg gcgaggcgga agaagatcca ggacgacttc tgctcgacgc 240
tgtgcgaggg caagaagggg acggacctgg tcgtgtgcaa ggagtcctgc gcgctctccc 300
agcagtccaa cctggtgctg tacggcagga tccagtgcaa gggcaagtgc accg 354

<210> 4921

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-E10

<400> 4921

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atgacgaagc cattgatccg gctgctgctc cctgcctgca gcaacacggc cacctccgag 120
ccgtcctcac ccaagtcctt gcactgcct ctctgacga gcatgcaggg ctcgacatc 180
gagacggggt cggcacagat tgtgaggccg tccagcctcc ggatgctcct aagcaagcca 240
accacacggg tgcaactacta ctggcgcaag ttcgacgacg cgctcatgcg gcccatgttt 300
ggcggccgcg ggttcgtgcc cttctcccct ggatcgcca ctgagcagag cgtccacgac 360
ggacggtgaa caaagccgcg tctgacacca agag 394

<210> 4922

<211> 321

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-E12

<400> 4922

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tagcgggtcg gcggcctatg cgcggggcat ctttcgagtg cgtgcgtgtc tgttcaagct 180
 ctgatcgtct cgccggccca ttcgccggag gaaactgacg gcgccttctc gctctcgctc 240
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<210> 4923
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-E8

<400> 4923

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 ctccgcttgc gaggtggtat gcagatcttt gtgaagacct tgactggcaa gaccataacc 180
 ctggagggtg agagctccga caccatcgac aacgtgaagg cgaagatcca ggacaaagag 240
 ggcaccccc cagaccagca gcgtctgac ttcgctggca agcagctgga ggatggccgc 300
 accctagcag actacaacat ccagaaggag agcactctcc acctggtgct ccgcctccgc 360
 ggtggtcagt aagccatggg tcatttaagc tgctgctgta cctgggtatc tg 412

<210> 4924
 <211> 126
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-027-Q1-E1-F1

<400> 4924

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 aggagc 126

<210> 4925
 <211> 410
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F2

<400> 4925

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attggggggca ctaaatacct accacattgc actcagacta cataactgt gtttgtgtgt 120

tgtatgccgt atgcgtgtgt gagcttgccg aaattggaca tctaggccgt gcgtaccctg 180

cgatgaaagg cgccgtcatc ggcgcacga cgcctctggt cgtggcgggt gtggccacca 240

tctgcgtcgt ttccttcaaa ggcagcggcg atggcgggag ggccgaggag ggcgagatgt 300

ccacgtcggg gaagtccatc aagtccttct gccagcccgt ggactacagg gagacgtgcg 360

agaaggcgct ggacgtgca gccgggaacg ccaccagccc cacggagctg 410

<210> 4926

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F3

<400> 4926

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catcgtgtgc gaccgcaacg gcagtgtgaa gaatgcttcc gtcgctaggg ccaacttgac 120

atctcctcgg ccatcagaga tcattctctg caggacagc aattccacga cccagcagga 180

agtgaaggcg ctctctcttc agatgtcatc tgtgcggggc ctcgatggtt cttccagtga 240

aggatctcct agccccggta ccagcgtcc gaacgaagag agcaaccctg cggcagcgag 300

caagaggccg tatctcgaga ggaactactc cgtgctggaa ccttcagaag ggagccagct 360

cgccgacgac gtggaagggg aaagctctct cgagaacgtg aagaaacagc tcgagctcaa 420

c 421

<210> 4927

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F4

<400> 4927

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cgcgcgtcac agctgcggtg ctcttctaca tctcgcctg tgctgccctc agcgcggccg 120

aggccccggc agagtcaccg aaggaaggca gtgctgcca ggcacctgag tctgccaaga 180

gaactgctgc ccccgctgaa gcacccgaag ccgcatccac ccccgtcgcc gccgctgccc 240

catcgccgtc gtctagggag tctgggtccag ctaccgcgcc agccaacggc tccacacccc 300

cttcttccac ggacgaagag ttgagccctt ccccgccagc atccaacgcc gcggcgctccc 360

ctgcggctga aggaccggct gctgattact ccgccggtgc tgctg 405

<210> 4928

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F5

<400> 4928

cgggtcgacc cagcgcgtccg ggggcggtag gccgccgtgc ccgttcttcc cagctgcagc 60

aaccggccag tgcgcgcggt tgcgttgcac ttgcatggct gcgcgctgcg ctctgggagc 120

ttgcactagc gggtcggcgg cctaggcgcg gggcatcttt cgagtgcgtg cgtgtctgtt 180

caagctctga tcgtctctcc ggcccatcgc ccggaggaaa ctgaccgccg ccttctcgtc 240

ctcgtctctt accctattcc cggggctgag aggggaggag agaaggccac gtccacacca 300

taaagcagga cgtacagaca cgtgtacgag ggggatcacg gtcgggtgag gtgactaagc 360

tggcggacgg aacgacgacg attgcg 386

<210> 4929

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F6

<400> 4929

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aggagaaggg ttgatcacga ccggggagga cgcgtggcca gagatgggtc tccacggagg 120

cgctcgtcgtg ctccgcgcgg ccgtgctcgc cgccgtcctc ggcttcgtcg ccgctgccgg 180
gttcatctca aacgacgcgc tgctggagcg cgggcacgac accaccggcc ggagcctgct 240
gcaggccaag aaagattgcc cggtagctt cgagggcgcc aactacacgg tgatcacgag 300
ccggtgtaag ggcccgtgt accagccgac gctgtgctgc ggcgcgtca aagacttcgc 360
gtgcccttac tccacctaca tcaacgacgt gagcaccaac tgcgccgcca catgttcagc 420
tacatcaacc tctac 435

<210> 4930
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F7

<400> 4930
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ccgtcgccca cctcaacggc ctctgccggg agcccaccga cgccaagttc ctcgagctca 120
agtcgtggct ctctccacg ctccggcgga cctccacctg cgaggacgcc tgcaaggacc 180
tgcccaagac cagcgacaag gacgacgtcg tcaacttcag cctcgacttc gagaagctgc 240
agcgcgtcac gctcgacctc atcaccgagg cgtcgggcac catgtccgca ggcatcgccc 300
tgccaccctc caacgccgga ggcacctcct acggcgcggc ggcgccttcc gggggctccg 360
ccgatggccc cgccggcgcc tccgagggcc ctgcg 395

<210> 4931
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G11

<400> 4931
gggtcgacgc acgcgtccag ctcgacgtcc ttcagtaggt gcattgcttc ggtgggtccac 60
catggcgag cgagcggtag ccacgatgac gactaataag cccctcctcc tctcgcct 120
ggcgtccgag ctcttggtg cggcgccggc cgccgcgaac ggcggggcg gggcggttcag 180
caactgggtg gcatgaacc agcagagcta cgcgctgtac ggcgagaagt ccgtcgggga 240

cgggggcaag gagccctgg acaagaagct gtcggaggcg gagaagaaga aggtcacgta 300
 cgtggtggac cccagcggca agggcgacta caccaacatc accgcggcgc tggaggatat 360

<210> 4932
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G2

<400> 4932

gggccgaccc acgcgtccag gttcgtggat ggcggtgcc caacctctcc tgctgtcgct 60
 gctggtcgcc gtgctagcgg tggccgccga tgtcgccaac gccggccacg ccaagcccct 120
 aacgcctggc gggcgcggtg tacacgacaa ccacggcaag ttcacggccg ggccgtggaa 180
 acccgcccac gcaaccttct acggcggggc tgacgggtcc ggcaccacgg cgggcgcgtg 240
 cgggtacaag gacacgcgca cgcaggggta cggcgtgcag acggtggccg tgagcactgt 300
 gctgttcggt gacggcgcg cctgcggagg gtgctacgag gtgcggtgcg tggacagccc 360
 tagcgggtgc aagcccgcg cggcagcgct ggtggtga 398

<210> 4933
 <211> 167
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G3

<400> 4933

atagtgagtc gtattaaaaa ccaagcctca gctgttgctg ctgccatcag ccgtgtcatc 60
 agtggcagcc gctagagcaa ctgccggtca ttcgactcca ctgccgacat gcaggcgagt 120
 ggtatactac aagcagtcga atatctacag gttgaacttg caagtgc 167

<210> 4934
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G5

<400> 4934

gcggggtcgac ccacgcgtcc aggagtcgca gggcgtgccc accaagcagg cggaggcgat 60
cacctccgcc atcacggagg tectcaacga cagcctcgag agcatctccg agtccttcgt 120
ctccaaggcc gagatgcaga agagtgagat gctgcaggag tccaatatct ccaagttcaa 180
gtcccaagtg cagagctcgc aggaaaacca tttctcttta ctacagcggg agactgagaa 240
acttcgcgga gatattgata agatgaggag tgaactgaag tatgagatcg acaaggtcac 300
cgcaggacag cgattggatc tgaatcttga aagagggcgc atacgtgatg agcttgccaa 360
gcagaatgag gaaaccactg agcttaccac aaagcttggc aagggaatcc actcact 417

<210> 4935
<211> 345
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-027-Q1-E1-G6

<400> 4935

ttactacacc ctatagttag tegtattaaa ancgcggtcc ctctaggcgc ggcgggagtt 60
catgcggcgc ggcggcgggc gcgggagggg cgacgccagc tatcgcaagt cggtggtggg 120
ggtgcggagg cgtggtcacg gcatcgaggt gttcttgtag gaagcagcat catcagcccc 180
acgacgcccg ctgcggcagc agcgacgacc actaccagca cgacgtgatc atgctgagga 240
caacgaagag cgggcggggc ttcccgccgc cgatatccgt gatctgcaag ggcgggcggg 300
cgtggctctg cctgctggcg caccgcgagg gtggacgcct cgtgc 345

<210> 4936
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G7

<400> 4936

cgggtcgacc cagcgtctta ccgctctctc ttctctgct cttctctgcc tgctgagct 60
caccgcacct cgctctctca ccgcgtttcc tccgttaatc cggtagaaaa tggccgatgc 120
cgaggatatc cagccccctc tctgcgacaa cggaactggc atggtcaagg ctgggttcgc 180
tggcgacgac gccccgaggg ccgtcttccc cagcatcgtg gggcgccccg gccacactgg 240

tgtcatggtc gggatggggc agaaggacgc ctacgtcggc gacgaagcgc agtccaagag 300
 gggatatcctg accctcaagt accccatcga gcacgggatc gtcagcaact gggacgacat 360
 ggagaagatc tggcatcaca ccttctacaa cgagctccgc gtggctcccc aagagcaccc 420
 gttctcctc 429

<210> 4937
 <211> 325
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H1

<400> 4937

ttcgcggggtc gacccacgcg tccatttttt ttctgaccac aaatcaacat taacattatg 60
 gaatgggatt acagatatac actagcataa tgaataagtt ccaagattgt gaggcgtcgg 120
 tctaataata attacatcgg ttggttttgt gatgatccaa agaagaaaga aaatacaaac 180
 cagcggatta tatattcggc ggagacttga gagtacgtga gaaagagaga ggttacgaag 240
 agtgattata tatataatat atgcatgtta gtcaattggc tcagatgcag gcgagctcct 300
 ttgccaagcc gatggacttg ccgac 325

<210> 4938
 <211> 357
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H12

<400> 4938

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 aatatgggtc agattgtgaa cctagtagat gtccatgact tcgttcctga cagcgtggaa 120
 agtgatatctg agctgatggc cctccctcc ccggactcca gctacggttt ccatgttccc 180
 ggcgagaagg agttctccaa ggagcctcct cagctgccgt cccagctcta tctcggcgtg 240
 ctgaattccc ggagcaccga agaaggctgc gcgaggccga ggcacgtcgt cctcgaccat 300
 ctctacatcg agaagggctg gggcgcacag ccgctgggtg ccctcggcta caccac 357

<210> 4939
<211> 441
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H2

<400> 4939

gggtcggccc acgcgtccag ccgagttcga cgcgttccag gacacgctgt acgtgcacgc 60
gcggcggcag ttcttccgca actgcgtggt ctccggcacc atcgacttca tcttcggcaa 120
ctcggcggcg gtgttccaga actgcctcat catcacgcgg cggcccatgg acaaccagca 180
gaactcgggtg acggcgcacg ggcgccacca cccaacatg aagtccgggc tcgtcatcca 240
gaactgccgc ctggtgcccc accagaagct gttcccgac cgcttcaaga tcccctcgta 300
cctgggcccgc ccctggaagg agttctcgcg cctcgtcatc atggagagca ccatcgccga 360
cttcgtcaag ccagaggggt acatgccctg gaacggcgac ttcgccctca agacgtctta 420
ctacgccgag tacaacaacc g 441

<210> 4940
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H3

<400> 4940

ggtcgaccca cgagtcggga aataattggg aataaatagt tcgtgaatcc ctgaagcgtg 60
catatatata ttcttgccaa gataaaggta atggagtcgt cacgcagggt ccagccggcc 120
gtcatcctgc ttctcctgct cattgtgtcc accgatatgg cacaggcaag ggaatgcgag 180
aagtacagtg agcgatttgt tggggcatgc atgatcgag acaactgcgc caatgtgtgc 240
cgcggtgagg gcttcttggc cggcagggtgc agcaccttc gccgccgctg catctgcact 300
aggcagtgct aaacaagatc gctcgatcgc ttgccatgca tcgacaacct attcttaata 360
acgttcatta tctcgttctt atttatgacg aatgtcatgt atgttctggt gactgtcatg 420
tatattctga tgactgtc 438

<210> 4941
<211> 442

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-H4

 <400> 4941

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 cctgaattac tagataatat ggaatcgaat caaaccaagt actagctccc ttgttccatc 120
 ctctgcatgg ctccgatcta gtaaataagca tataaccccc atagaagaaa agaaataagt 180
 aagctcagac agtgactgga ccgcacagaa tcatatttca tcagctcttt tttcttgaaa 240
 ttttattggt tattttaccta ttgtctatca tatattcata atccctatcc cctagccttt 300
 tatttcattt ttcttggtac agtgggtcatg tgcccatgc acatattctt tgaaatgcac 360
 tacatgtctt ttcccatgca caaggataaa tagtctattt cctttcggag tgtaagattc 420
 atcatgaaaa gcatttctca ta 442

<210> 4942
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-027-Q1-E1-H5

 <400> 4942

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 caagctcaac aacagccagc tcgcgaaaat aatgaagagc cgcagcatgg catcatcggc 120
 cgcgctcttg gtgctagccc tcgcgctagt ggcggccacc gcccacagg tagcggaggc 180
 aaagaagaag agagcggcgg agagcggcga ggcggcggag gcgaagaaga tccaggacga 240
 cttctgctcg acgctgtgcg agggcaagaa ggggacggac ctggtcgtgt gcaaggagtc 300
 ctgcgcgctc tcccagcagt ccaacctggt gctgtacggc aggatccagt gcaagggcaa 360
 gtgcaccgag cagaagggca tcacggcgcc ggccatg 397

<210> 4943
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H7

<400> 4943

tacaagactc taaaatgagt cgtattaact agaacacaaa ctgaacagag tgggtgagtcc 60
 tacgtacgta cgtgtaacaa ctagcaccgg tcgatcgata caatattctt caacctgaca 120
 cgtgggggtct gcactaccgg cgacggacga ggggtgagctc gtcattattct caaatttcca 180
 atattttaata tacgtgtgtg cgataatgta tttatttgta atttcgcgat tgtgtaatac 240
 ttggggggatt tgctatgttt cggtcgcctc taaaatacac tatattttta gacaacgatc 300
 tttatcgta attagttcat gagcatgtaa agctaagatt cattttaacg caggaaaaaa 360
 aaacaagaac gaatggatac attgtctctt 390

<210> 4944

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H8

<400> 4944

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 aggccaccat ctccacaccc aaggttgacac ctgagaccac taccatccac attgagggtg 120
 cggcaaaaaca tgcagtagtt gagaaggtgg aggaggacaa ggaggaggca ctaacagtgg 180
 cggcgaaaaca agagccagca gccaccattg agcctcagca gattgctagt gaggtgacca 240
 cttcggaagt ggcggtcgtc gttgtcgagc ctgagaacaa agaggaggag gaagttgtgg 300
 agaagaccgt catcgagaag gagaagccat cagcagtcca tgcagaggaa aatattgcca 360
 ccaacaaggt ggcagccgag cccacgacag aattgaagaa agacaccgag gaggagatat 420
 aga 423

<210> 4945

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H9

<400> 4945

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 tgccgctgag gagacgacga cgactccttc gtcaggcggc ggggggttacg gcggtgcaac 120
 cggcaaggct tcttcaggcg gcggcgggct ggaccccgac ggcgaccag aggttgggct 180
 gaacgggaag gcgatcgagg agatcgtgaa cgagcacaac gtgttccgcg ccaaggagca 240
 cgtgcctccg ctggtgtgga acgcgacgct ggccaggttc tcgcagcagt acgcggagac 300
 gctcaagggc aactgccagc agatccactc gtcgtcgccg tacggggaga acctgatgga 360
 gggcacccccg ggggctgacc t 381

<210> 4946

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A10

<400> 4946

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 tccctacaaa tcgaaacaaa gaaagataaa atcgagagga cgccagggcc gattctctgc 180
 gtgacttggg gcgtcgtcgc cgagttttct ccggccgagg gcggcgcgac cgacaacca 240
 gcgtgagcgc gaccggcgac atgactcgcg gcaaccagcg tgaccgcgac cgtgagcgcg 300
 cggcggcgcg gaagcccaac gccagaact ccaggacgg gtcacccccg gagcagcgcc 360
 gcg 381

<210> 4947

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A12

<400> 4947

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 tcagcaatgt cgcagtgaag gcggcgggcg tggccgcgct gcttgtggc gcagtgggtgt 120
 cgctgccgc gcgcgcggcg gcggtggcg tggcgggagg ggcgccgtcg gttccggcg 180

gtccgctgga catcgcgag ctgggcgcca agggcgacgg caagtcggac agcacccccga 240
 tgatcctcaa ggcgtggaag aacgcgtgcg aggcgacggg ggtacagaag atcgtcatcc 300
 cgccgggcaa ctacctgacg ggcgggctgg agctgaaggg cccctgcaag tcctccatca 360
 tcatccgtct cgacggcaac ctgctcggc 389

<210> 4948

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A2

<400> 4948

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 ctccaccttt ctcttttct tgccacggca aaacaccttc gccggcgaga gcatggcgat 120
 ggcgtaccgt gtcttgagg tcacctggt gtcagcaaat gacctcaaga aagtgtcgct 180
 cttctcccg actcgcatct acgccgtggc ttccatctcc ggattcgacc tccgcatccc 240
 ttcccacagc acccaagcag accacagcaa cggtgcaac ccctgctgga acgccgtggt 300
 acacttcccc atccgggtg ccgctgacac ccgcggcctc gactccacg tgaggctccg 360
 cgcccagcgt ctatacctgg gcga 384

<210> 4949

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A4

<400> 4949

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 aggtctgata ggcaacccaa taatggcaga agtcctatca ggatctcatg aacaccgtct 120
 aagctctgcc ttagatggac actacgacga gaagaggaaa tccaatgtgg aatacacaga 180
 ggacgagaag aaagccgtga tcgcggtct gaaaaagaag gctttgagcg cctcacagaa 240
 gtttaggcatt tccatgaaga gggggaggaa gagcagcaag gtgatgtcca tctcgattct 300
 ggatgagcgt gaacctgagg aggtgcaggc tgtggatgcc ttccgccagc ttcttgact 360

tgaagagctg ctaccatcgc agcatgatga ctaccaca

398

<210> 4950

<211> 322

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A5

<400> 4950

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ggggctcacc tctcgccaaa caggctctgg attccgggcg tggcggaggg atttgctgag 120

gccggacagg acggccggcg aagcttgggc gccgccggcg cccaaggcca acaggaacgt 180

cccaagacgg cgcttcggtc gtcgttgact caccagatg cagtcgcacc cgcccaatcg 240

ccatcgtgtc atgacagatc gatcagaaga tagctagcag ttcccatctc actggtgtgt 300

gttaatttag ctccggttaa cg 322

<210> 4951

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A6

<400> 4951

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ccggtcgtcg atcgaggaac caagctgctg ctgctgctac cggacgacac caaccatgat 120

acggaggacg acggtgtgcc taggcctgct gcttctacta ctggcggcgt cgactgcgac 180

ggcacatttc tcgatcggcg acgtggacga gtacttgaac aggcgcacgc aggagtcccg 240

ccacaggaac cacggcggcg cgcagatcaa tgacctatc tccagtgtg cgcgcttcca 300

cgccaacgtg gatgcacgcg cgtatggctg ccgctccaac ctgcagctgc 350

<210> 4952

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A7

<400> 4952

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gggggaagcg ggacgaggcg ctcatcctcc ccatcaacga cagcatcagc gtaacgctcg 180
acgccgacca tctctccgcc accaccactg tcgccgtcag cccctcattc ccttccgacc 240
gcatgtggct caatggcaag gagatctcgc tattacgagg aaggtttcag agctgcctca 300
gagaaatcag aaagcgtgct cgtgactttg acgacaa 337

<210> 4953

<211> 328

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A8

<400> 4953

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gaataataat tgatatatga taaaaaaaga tataagctct aacttaaata aatatataat 120
gctaaaagag gaaatcaaga tgtacaatac ataaaggata aaaggggggg cgtcttaac 180
ggttttggcc ttttattgct ttgagcgct catagaagtt tttgcattgg atcatcaagg 240
tgtagtttat gtggattggt ttttacatct tcattctggg aaaaccttgg ttttatgcag 300
ttttaggcgt ttttgtcaaa cgcccttt 328

<210> 4954

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B1

<400> 4954

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gttcatcggt tccaaggacc acctcgct ccagctggtc gtggagggtca ccgtgcatgt 180
gcacgtcatc gcgctcgag ttcgggcaga cgacgtatc cgtggactgc tggatcaccg 240

gcgatcggct gagcaacgac gtgcacattg cgtcgcacag ttgcaggagc agcttctcgg 300
aacgacgacg gtccagagcg cctgtggtct ggaactctgg atcgtggggg aatggcaa 358

<210> 4955
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B10

<400> 4955

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gcagtatgca cagctaacat gactgtatca aaagcaggag acttgtcgcc agccccctgct 180
ccgttacgat caggaggcgc caccgcagcc caaaaaagtg cggctacagc caacaagacg 240
ttcgacatat cgaagttcgg ctgcaccacc gacggcaaga catgactcga cacaggcagt 300
ccaggacacg tggacgtcag cgtgcggacc gatgggagac gcaaccatgc tcatcccca 360
tggcgactac ctgctgggcc ctctctac 388

<210> 4956
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B11

<400> 4956

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gattccgagc gcgacgccct ctcgattccg acggcgacgg gctgccctgc gccgctgcgc 120
gccgtgccag agacgggtcg ggtcagggtc agggtcaggg tcaggccgctc agtcgccgcc 180
ctgtactgcg gccgggacgt gtgtcggggg gcgattcgtg ccgcccgtc gtgctcggcc 240
ccgcggttca cgccagcgat tgcgggtgtg cttccccaaa ttccagaaca gcgtcgtttg 300
ctcgtttcga atggagagat cgatctcact ctactcact gtcttcgcgc ctaaacaatc 360
gtccgtgcgg ccatcattcc tattattt 388

<210> 4957

<211> 387
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-B12

 <400> 4957

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 ccatggtgct tggcgcgagg cgggagcgcg tgcggctggg gctcaaggtc gtgcgcggtg 180
 cgtacctgac ccgcgaggcc cggctcgcga ccgcgctcgg cgtgccgtcg cccgtgcacg 240
 gcagcatcca ggagaccac gactgctaca acggctgcgc cgccttcctc ctcgaccgcg 300
 tgcgccgcgg gtccgcctcc gtcattgctc ccaccacaa cgtggagtca ggccaactcg 360
 cggcgggcgcg tgcccaggag ctgggga 387

<210> 4958
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-028-Q1-E1-B2

 <400> 4958

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 aaggagatta ctgtgaattc tcnatgact gcaatgatca accagataat gtttgactt 180
 tctaccagaa agggacgtgc acctttggta gccgttgagc aaatgaacat gttgaagttc 240
 attgtaactg cccccaacca gcaaccactg tagcgcgtgc atcctccaat tcttctcagc 300
 tagttgcttc ttccagagat ccctattgca gcgaatgcca aacggattta tgtgaccaa 360
 cacagcagat ttgcaagtca acagcagcac tttctgcaca tcaaactgc 409

<210> 4959
 <211> 333
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-B3

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gacgagcccc acggccgtga agcacgtgag ctgcgtgtgg gacgcgtacg aggccaccaa 360
gggcgccccac gggctgtgca acc 383

<210> 4962
<211> 354
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-028-Q1-E1-B6
<400> 4962

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gcggtgaacc tgatccccgtt cccgcggctg cacttcttca tgggtggggtt cgcgccgctg 120
acgtcgcgcg ggtcgcagca gtaccgcgcg ctgacgggtgc cggagctgac gcagcagatg 180
tgggatgcca agaatatgat gtgcgcggcg gaccgcggc acgggcggta cctgacggcg 240
tccgccatgt tccggggcaa gatgagcacc aaggagggtg acgagcagat gatcaacgtg 300
cagaacaaga actcctccta cttcgtggag tggatcccta acaacgtcaa gtcc 354

<210> 4963
<211> 284
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-028-Q1-E1-B7
<400> 4963

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ctggcgggtga aactgatccc gttccccggg ctgcaattct tcagtgggtg ggttcgcgcc 120
gctgacgtcg cgcgggtcgc agcactaccg ctgcgtgact gtgccggagc tgaggcaaca 180
gatgtgggat ggcaaaaata tgatgtgcgc agctgaccg cagcacaggc ggtatctgac 240
ggcgtccgcc atgttccggg gcatgatgag caccaaggaa gtgg 284

<210> 4964
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B8

<400> 4964

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 cctcacggcc gacggcgtca cctaccataa gacatgcttc aagtgcagcc actgcaaagg 180
 gatcctctcg atgtgcagct actcttccat ggacggtgtg ctgtactgca agaccactt 240
 cgagcagctc ttcaaggaga cggggagctt ctccaagaac ttcacgccag gtggcaagtc 300
 ttcagacaag ggtgaactga caagggcccc cagcaagcta tcactctgct ttt 353

<210> 4965

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B9

<400> 4965

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 ccggcctctg ccagcccgg gctgcctgcg agggcttctg atggccctcg acgccgtcct 120
 ttctcctaa tgcccagctt tattgcagat ccagccctct gatcctcgtc ttctttcatc 180
 tctccaacat gaaggtaac accaagatca agctggagcc ggtcatggcg ccatcgctcg 240
 cactgccgcg gacgcgccagc gagctacccg acccgccgtc accgttcagc tccaacacgg 300
 tgcaccaccc cgtctccgtg cccaccacac ctaagttgtc cttatcgctg tcgtcgttcg 360
 gcc 364

<210> 4966

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C1

<400> 4966

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ctgctcgacg cctggcctaa cgagctgccc gcggctcgctt aagtcacccg agtttggttt 180
 tttgcaggat tcttaaaagt tggaccgtcc tgctagtact ccatgtgtcg tgttttcaca 240
 ttggaggacg tctgtatatg taagaaaatc ctctggcgct tgtgctcagc ttgatgaaat 300
 atccttgtag gggttggtacc tggaccgct agagctggct ggctcgtaa attgtgttc 359

<210> 4967
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-028-Q1-E1-C10
 <400> 4967

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 ccaattgcct tcgtctagta agaaagtgc tggatattgc agaagcaatc ggcacatctgga 120
 tctagccctt ggcttctcat ggcctagata aagactccaa ctttaaccaa agcttcagga 180
 gtaagctagt gaaggaatat ctcaaatttt ttcagcactt cgactaacat tctatgcgaa 240
 ggaaagcata tcccagcttt catgaaactt cggaaaacca ctactccgat ccatctgact 300
 cgggaagaag aacagtgtc tctcctccg ctctcactat ggatatatca tgaaaatatt 360
 ttcccttcat tgtctcaatt tgcctttct tg 392

<210> 4968
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-028-Q1-E1-C11
 <400> 4968

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 cgcgcgcggc ggcggtggcg gtggcgggag gggcgccgtc ggtgccggcg ggtccgctgg 180
 acatcgcgca gctgggcgcc aagggcgacg gcaagtcgga cagcaccgcc atgatcctca 240
 aggcgtggaa gaacgcgtgc gatgcgacgg gggtagagaa gatcgatcgc tcgccgggca 300
 actacctgac gggcgggctg gagctgaacg gccctgcaa gtcctccatc atcatccgtc 360

tcgacgca cctgctcggc accggcgacc tcagcgcg

398

<210> 4969

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C12

<400> 4969

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agctcgcgaa aataatgaag agccgcagca tggcatcatc ggccgcgctc ttggtgctag 120

ccctcgcgct agtggcgggc accgccccac aggttagcgga ggcaaagaag aagagagcgg 180

cggagagcgg cgaggcgggc gagggcgaaga agatccagga cgacttctgc tcgacgctgt 240

gcgagggcaa gaaggggacg gacctggctg tgtgcaagga gtcctgcgcg ctctcccagc 300

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gcattcacggc gcc 373

<210> 4970

<211> 390

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-C2

<400> 4970

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gctaattgcta attcggtgaa agagtgtaac acccttcttg cagatatgaa gttagtagaa 120

gggtgcaatg ctctgctcct ctttggttagt gaaaacccta tcagatcggg gggagggggg 180

atgtgtgctc ggatcacctg tggcactgaa ctttttttgt tgtggtgtgg acattggctg 240

ccctctaaaa tggaagtttg tttgcgcac gagatgcgtc agctgatgaa agaaccaaat 300

acaaggagca ggagtgatct tcctttttct cagatggaaa ctgcaaacgg gaaacagtgt 360

ggtgtangaa gaactctaac gaactcaaga 390

<210> 4971

<211> 448
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-B5

 <400> 4971

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 atgagcatcg caacgatggg cegtctgacc cgcagcatga tgcctgggaa ggttctcggt 180
 gctgccatag gtggagctac cctctcagaa ggtaaataca aagtacaaga gcgccagcgg 240
 tccaagctat cagaagagggc tgtggaggaa gctgaagacg ccgtctctgc aaagcgcctc 300
 tcggagcttg aggagaaggt cattgcactc ctgacaaaac ccgcatcaat gcctgctgat 360
 aaggaggagg ttctgcaagc tgctgtctcc cgcgttagtg cactggaaga ggagcttgca 420
 gctacaaaga agaccttgca ggagactc 448

<210> 4972
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-B6

 <400> 4972

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 cggcgcagct gccgcggcg ggcggcgccc tgaagccgga cttctatagc cagtcgtgcc 180
 cgcgcgcgga gcggatcatt gcggaggtga tgcagacgaa gcagatggcg aacccgacga 240
 cggccgcggg cctgctccgc gtcttcttcc acgactgctt cgtcagcggg tgcgacgcgt 300
 cgggtgctgat cgcctcaacc aatttcaaaa gtccgggcaa gacgccggaa ttaaacaatt 360
 ccttcccggg gaagcctttc aagccgttgg tccccgcaa cctggccctg aagctggagt 420
 gccccggggg ggtgt 435

<210> 4973
 <211> 441
 <212> DNA

Sequence

<223> Clone ID: LIB148-033-Q1-E1-C1

<400> 4975

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gagtacttca ggcggcagca gctcacggag aagtccgacg tctactcgta cggcgtggtg 120
ctcttcgagg tgctctgcgc acggccggcg ctgaaccga gcctgccgag ggagcaggtc 180
agcctcgccg accatgcact gagctgccag aggaagggga cgctggagga cataatcgac 240
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aagtgcctgt gtgaccatgg agtggaccgg ccgtccatgg gcgacgtgct gtggaacctc 360
gagttcgcg tgcagatgca ggacaccttc gagaacggcg ggaagccgga cgggtggaaga 420
ggcagctcga gcgacagtgg caccgtgtct at 452

<210> 4976

<211> 474

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C2

<400> 4976

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tcccagcagt accgagcact caccgtcccc gagctcacgc agcagatgtg ggacgccaag 120
aacatgatgt gcgccgctga ccctcgccac gggcggttacc tcaccgcctc ggccatgttc 180
cgcggaaga tgagcaccaa ggaggtcgac gagcagatga tcaacgtgca gaacaagaac 240
tcgtcctact tcgtggagtg gatccccaac aacgtgaagt ccagcgtgtg tgacatcccc 300
ccgagggggc tgtccatggc gtccaccttc gtcggcaact caacttccat ccaggagatg 360
ttccggaggg tgagcgagca gttcactgcc atgttcagga ggaaggcttt cttgcactgg 420
tacacgggcy agggcatgga cgagatggag ttcaccgaag ccgagagcaa tatg 474

<210> 4977

<211> 460

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-C4

<400> 4977

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 ggcggggaaa gcgcaagaag ctcagcagaa atggcggagc aggcaggcgc cggaaggtac 180
 tgggtgccaca tgtgcgccgc ggtcgtgagc cccgcggagg gcgaggcgga ngtgaagtgc 240
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 gatgacggcg acggtgacgg cgcggtggct caagtgtacc ccggcgccga ccgcccagagc 360
 tccatctggg cgcacgtat cctcagcagc gtcgacagct ccgtccgccc ccgcccgaac 420
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<210> 4978

<211> 112

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C5

<400> 4978

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 tctcgagtgg atctatgccc cgaatctttg ccgcgcacca cgccatctgt ga 112

<210> 4979

<211> 402

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-C6

<400> 4979

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 gcaacgccga ccacaaggac agcagcacca aggtggaaca gccggcggac agctccttga 120
 agccggcgag cctgaacgcg ttcgacatca tctcccactc cagaggggttc gacctgtcaa 180
 gcctgttcga ggtggaccaa gagcagaagg ccagcaactc gcggttcattg acccagaaac 240
 cggcgtcggc gatagtgtca aagctggagc agatcgctga gacagagcgc ttcattggtga 300

agaaacagga cgggctggtg aagctgcang ggtccaagca agggaggaag gggcagctcg 360
cgatcgacgc cgagatcttc gaggtgacac cggcctttca cg 402

<210> 4980
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C7

<400> 4980

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gccgccatcc gagcgaacaa gccaacgcac cccgtcccca aggcaatccg ccgccgacgt 120
accaccacca ccgcaggagc gagatggaga tgaagaggat cctcttcgcc gtctctcgctg 180
tcatcgccgc ctccggccacc gcagtgtgtg cctccaccga ggccgccgcc gcggggcgccc 240
caactgcctc cgagtcgtcc gccgaggctc ccgctggcgc tggcgctggc gctgccgctg 300
gcgccgccgc cggggggccc tccgccagca gcggcgcgcc cgcctctgcc gccgcgcccg 360
ccgcgtcctt cttctccctc ctgcctact acctccacta agcgtgtgctg t 411

<210> 4981
<211> 219
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C8

<400> 4981

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gaaggaggag gaggaggtgg agtcgcccac gagaggagca gctctgtctc cgggtgcctga 180
tgctagcctc gtctcctcag ccgcgatctc gactgatga 219

<210> 4982
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C9

<400> 4982

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gagacccccg tgaagctcgc tgaatacttc aacgtcaccg acggggtgtt cagctacaac 120

cagatgggcg acgtgcccc cgcctgaac ggtccctcc atgtcatccc caatgtcatc 180

accgccgagt tccgcacctt catcgagatc gtcttcgaga accccgagaa gagcatagac 240

tccctccacg tcgatggcta cgccttcttc ggcgtcggga tgggccccgg gaagtggtcg 300

ccggagggtga ggaagacgta caacctgctg gacacggtga gccggcacac gatccagggtg 360

taccgcgggt catggacggc aatcatgctg acgttcgaca acgccggcat gtggagcgtg 420

c 421

<210> 4983

<211> 450

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-D1

<400> 4983

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cgcagctcat cggcgggcgac gtgcctgtgc ctgcgtctcg ccgcggccac gctggcgctg 180

gccccagggg cgcaaggagg aggaccatcg gcatcggcgg cggacctgga caaggtcacg 240

gccgagacct tctcgcacat cgagatcgac ggcaagcctg caggccggat cgtgctggga 300

ctgtttgggg acaccgttcc taaaacagca gagaacttcc gagcactttg cacaggggag 360

aaaggaatgg ccaagtccgg caagcctcta tggtaacagg ggtcgacgtt ccacaggatc 420

atcncgggggt tcatgattca gggaggcgac 450

<210> 4984

<211> 280

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D10

<400> 4984

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agtacgtacg tacgtgtaca cctgattatc cgaagaagat ggccagccga ttattaacca 180
ttggctatct tcgatcgggg ccaatttcag aaggaatttc ctttactttc tgtagcaaata 240
gatcggggtc ctgcacagtt catcaggaat tccattgtat 280

<210> 4985
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D11

<400> 4985

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ctcctcttcg tcgccatggg tgtggcaccg atggccgagg caaagtccgc tgatgcccc 180
tccgccgacg cccccgcccc cgctgctgac gcacctgccg atggacctag cggaccggcg 240
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tccaccaact aaggccaagc acgtcgggtc ggttgcatth ggaacaagac atggaagaaa 360
agtgagagca atgtcgttta aaacaaaag tccataataa tgtgtggtca ttcgtgatat 420
g 421

<210> 4986
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D12

<400> 4986

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catgctgctg ctacgggacg gcgccgccc cgcggcgagg tgctgcgcta gcgctacggc 180
gtgcaagagc aagcaggcgt ccaagccgtg ctgcgcgacg gtgaagccgg tggcgacgac 240

gaggcacagg cacgggcacg ggcacgggca cgggcacgca ggcgcgggga agcccgggac 300
gctaggaggc gacaagcagg gtaaggactg ccatggttgc tgccagaagg agagcaagcc 360
gcccgaggac gccgtcgtga tcgccattcc ggggaacggg ccctggacca ccgggaagga 420
ggcccttccc tc 432

<210> 4987
<211> 459
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D2

<400> 4987

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cggcgggtcg tgcgggcccc cgaagggtgcc acccgcccc aacatcacca ccaactacaa 180
cggcaagtgg ctcaccgcta gggccacctg gtacggtcag cccaacgggtg ccggcgctcc 240
tgacaacggc ggtgcgtgcg ggatcaagaa cgtgaacctg ccaccctaca gcggcatgac 300
ggcgtgcggc aacgtcccca tcttcaagga cggcaagggc tgcggctcat gctacgaggt 360
gagatgcaag gaaaaacctg agtgctcggg caatccagtc acggtgtaca tctactgacat 420
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<210> 4988
<211> 451
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D3

<400> 4988

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ctcgccctcg ctcccgggc cgtcgccgtc gccgtcaccg tggaagccta cgaaggcgac 180
gctgatccgc tctacagagc ttgtgtggaa ggatgccaaa agacaggctc cctgaaggag 240
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acgcatgagc cactgtactt gcaatggaag gactggaact gcaagagtga atgcagatac 360
 cactgtatga tggaaaggga gaatgaaagg gcacagcttg gcctccagcc tgtaagtat 420
 catggaaaat ggcctttgaa gcgtgcctct g 451

<210> 4989
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-033-Q1-E1-D5
 <400> 4989

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<210> 4990
 <211> 406
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-033-Q1-E1-D6
 <400> 4990

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 aagaagcccc acgtcaacca cggcaagttt aaggcggagc cgtggacgga cgggcacgcg 180
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 gtgacggcca ccaacgatgc cccccgccg gtgagcgggc agaagg 406

<210> 4991
 <211> 349
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D7

<400> 4991

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 cactgccccg ggtatcaact gatgtaagtc caggatgctc gacatcaaga tcgagcacgc 180
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 acgccttcaa catctgaagc tccacgacta tgtctatcat tacttcgacg atcgggtactt 300
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<210> 4992
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D8

<400> 4992

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 cgaattcctc aacatcttca aaccgcggaa tgagcacgac tacttccaca acgcgaacca 180
 ggaggaggat gtgatgcccc gggccagcga ccagcagaac ctcataacgg cgccggtgac 240
 caagagcggc ctcatgaagg tgccgccccg gtccgcgccc accgcggtgg cgcaggacac 300
 ggtggtgctc cccgtggaca gcgcgcggg gttccccggc gcttgggtcca tcatcagcga 360
 gaacgcgggc gtgtccgcga tgcacctggt gatcatgccg agcgacaagg ccatcatggt 420
 cgacacggtc aac 433

<210> 4993
 <211> 454
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E1

<400> 4993

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cgctcaaggc cagcaagttc ctgtacgagg gcatcaccat ggacaatgtc tcctacccca 180
tcatcatcga ccagaagtac tgccccaaca acatctgcgt caagtccggc gcctccaagg 240
tggccgtcaa cgacgtcgtc ttcaagaaca tccacggcac ctccaacacg ccggaggcca 300
tcacgtcaa ctgcgccaac aacctgccat gccagggcgt gcagctcgtc aacgtcgaca 360
tcaagtacaa tggatccggc aacaagacca tggccgtctg caagaacgcc atcggcaagt 420
ccatcggtt ggcaaaagag ctgcctgca tctg 454

<210> 4994

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E11

<400> 4994

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tcacgtgcc tgaaataaac gcttacaaga accagctaac cgtcatttgg aattggatgc 120
tgagaggtaa ccataccagg acccagactc ctggagattt cagaccagag ccgctgtcga 180
ttatcacagc ttctgctgaa acgccatcat ccgagcttag gtggggcagg tgactcattg 240
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gggggaaaag gcggagactg cggtagatgt aaatctgtaa atcattgctg gatagctccg 360
gttgctccc ttttactacc caacattcta gatttagtaa atataactaa ttctgac 417

<210> 4995

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E12

<400> 4995

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atccggatcc atgtccgcag gcatcgccct gccaccctcc aacgccggag cgccctccta 120
cggggcggcg gcgccgttcg gaggtgccgc ggacgcaccc gccggcacct ccgagggccc 180
tgccagcgcc agcggggccat cagctggtga cgcgccggcg tatggcgcca gcgccagcgg 240
cccgactgct gatgctccgg cggcggcggc ggcgcgggcg tcgtccgggc cctctagcgc 300
acccgcgcca tcgtcgtctg agtcctccgg cgcaccaggg ccgtcgtcgt ctgatgggtc 360
ctccggcgcc ccggcgcaat 380

<210> 4996
<211> 461
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-E5
<400> 4996

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cctcggtgaa gctccgcgtg cagacgtccc ggggcgtgag ggcgcgcaag cagaagctcg 120
tcttcggcgg gcgcgagctg gcgcgcgacg acgggcgcat cctggactac ggcgtggcgg 180
acggcaacgt ggtgcacctg gtcattccgc tcccggacgt gcgcctcatc accgtggaga 240
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agcagcagat cgccaaggac caccgccggg gggcgcgccc cggcgagcag cggctcgtgc 360
tcgagggcga ggacgtcgac gatcgccacc tcattcacga agtgtgcatg ggccgacggc 420
cccgtgatac acctgctggt tcggcgctcc gtcttcgcgc g 461

<210> 4997
<211> 187
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-E6
<400> 4997

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actcgtcgtc cggccttgcg gtcaacgacg agtgcaaggt gaacttccgg gagctgaagt 120

cgcggcggag cttccggttc atcgtgttca ggatcgacga cacggagatc gagatccggg 180
 tggagcg 187

<210> 4998
 <211> 312
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E7

<400> 4998

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 gtggaatgcc cctaatacaa tgcatacttc acttttgaat gatgccttgc gatggacatc 180
 tatagaccga catgataaag atctatagtc acccttgcca tagcaggggt ggaaaccatg 240
 cttaagtgca tgagtttctc acaaattacc cctggaatca cgttgatacg tccaagtatt 300
 tcctgatggt gg 312

<210> 4999
 <211> 331
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E8

<400> 4999

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 acgtgtacga ctgcgtggac gtgcacgtcg ggactggct ctccgtgctg gtcgacgccg 180
 accaggcgcc cggcgactac tacatgggtg gctccacgcg gttcatccac gaagccaagt 240
 ccgcctcggc cgtcatccgc gacgccggct ctacggcggt cccgccgggg ccgaacatga 300
 ccgagccagc ggccgcggtg ggcttggtcc a 331

<210> 5000
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E9

<400> 5000

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ccggcggcgg ggaggccgcc gaagctgtcg atggagacgt tctcggggat gatcaagagg 120
ccgttcgcca agttcctgag cccggtgac aagggcggtg gcgccaagac ggagtaccg 180
gaggactgcg agtcgtcgat cgggggcctc ccgggggccg cgtcggcggc ggccacggac 240
agcgtgggcg tgctgaagct ggccatggag gcggtgcggc agaaggccat cgaggcgatg 300
aacgcggcca cggacaggat gaacgcgccg ggcacggacc cgacgaccaa ggaggcgctc 360
gactcgtgca cgtcgtcgta cagcgacatc aagacgagcc t 401

<210> 5001

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F1

<400> 5001

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gccgcgccgg gttcgtgacc aacgtcaccg agtacatcgc gggcgccaag gtgaggctgg 120
agtgaagca cttcggcacc ggcaagctcg agcgcgccat cgacgggggtc accgacgcga 180
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tcctgtcac caggaacgtt ggcatctccg acagcctgcg ccccgccaac ccgctaggct 360
acttcaagga cgtgccgctc cccgtctgcg ccgcgctgct caagcagctg gactcggacg 420
acgacgacga acagtaaact ataacac 447

<210> 5002

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F10

<400> 5002

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gaggtagtca agaagacgtg ctgtttgaag agcatgagca tacaacagct gatgggtctc 120
cttccaacgg tgacaagttg agcggcgtag cgaatcttaa ggctgggatt tctctgctca 180
atataagact gagggcactt gaagacgacc aggagtttct caagcaggtg ttgagttccc 240
tccaatgcgg tagtgatgga atgcagtgtg tacaggagat aagcggccat ccagcagagt 300
tgcgaaaagt tgtaactcgc taaagaaaat ggttttgccc cgagtccaca ctgttaggtc 360
atcgtgaggt cttctcat 378

<210> 5003
<211> 393
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-F11
<400> 5003

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cccttcgttc ttctctgtct cgatcccgac gacgctccgt tcgggtccgg caaaccacat 120
caagtcgcga tggagatgaa gaaggctgcc tgcgccgtcc tcgccgccgc cgcctccgcc 180
accgtgggtcc tcgccgccga ggccccggcg cccgccccca ccagcgcctc ctcggccgcg 240
ttcccgccg tcggcgccgt gctgggcgcc tccgtgctct ccttcttcgc ctactacctg 300
cagtaaaatt aaaggaggat cggagggaga ggctgctggc tgccattgcc tgtattcggt 360
tggattccgt ttatatatat atttaagtac ttt 393

<210> 5004
<211> 420
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-F2
<400> 5004

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aggcgtcgct caacttccgc atccagggcc acgacatgaa gtcgtggag ctggagggct 120
cacataccct gcaggacgtg tacgactcgc tggacgtgca cgtcggccac tgcctctccg 180

tgctggtcga cgccgaccag ggcgccggcg actactacat ggtggcctcc acgcggttca 240
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 cggcgcccaa catgaccgag ccaccggccg gctgggcctg gtccatcaac caggccaggt 360
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<210> 5005
 <211> 327
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F3

<400> 5005

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 gacggtggag gaggcggtgg cgctacgaca gtatatatat acacaattac acatacacac 240
 cccaaaaaga aaagaaaaaa actactgcca ttgctgtcgt tgtgcgtagc ttctctctat 300
 atatataccc gtatttaaata tctcgac 327

<210> 5006
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F4

<400> 5006

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 tttcgacaac accatgaggg agtgcattct gatccacatc ggccaggccg gtatccaggt 180
 cggaaacgcg tgctgggagc tgtactgcct cgagcatggc attcaggctg atggtcagat 240
 gcccggtgac aagaccattg ggggaggtga tgatgcttct aacaccttct tcagtgcagc 300
 tggcgctggg aagcacgtcc cccgtgctgt tttgttgac cttgagccca ctgtcatcga 360
 tgaggtgagg actggcacct atcgccagct cttccatcct gagcagctca tcagtggc 418

<210> 5007
<211> 125
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F5

<400> 5007

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cgacgaccat cgccgtgtac accgcggact gccaaagtga cgatcgagtg catgcagtct 120
ctcgc 125

<210> 5008
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F6

<400> 5008

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ggcaataatg gcctcggttc cggctccggc gacgacgacc gccgccgtaa tcctatgcct 180
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tggccgcgtg tactgcgaca cctgccgcgc cgggttcgtg accaacgtca ccgagtacat 300
cgcgggcgcc aaggtgaggc tggagtgcaa gcacttcggc accggcaagc tcgagcgcg 360
catcgacggg gtcaccgacg cgaccggcac ctacacga 398

<210> 5009
<211> 217
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F7

<400> 5009

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atctccaacc acgacttccg gtaccgcaag taccacatcg acgagatcga gattgccacg 180
gagcgcttct ccgacgagcc caggatccgc gagggcg 217

<210> 5010
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F8

<400> 5010

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tcaacttcag cctcgacttc gagaagctgc agcgcgtcac gctggacctc atcaccgagg 180
catccggatc catgtccgca ggcacgccc tgccaccctc caacgccgga gcgccctcct 240
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ctgccagcgc cagcggggcca tcagctggtg acgcgccggc gtatggcgcc agcgccagcg 360
gcccgaactgc tgatgctccg gcga 384

<210> 5011
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G10

<400> 5011

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ggccgcgctc ttggtgctag cctcgcgct agtggcggcc accgccccac aggtagcgga 180
ggcaaagaag aagagagcgg cggagagcgg cgaggcggcg gaggcgaaga agatccagga 240
cgacttctgc tcgacgtgt gcgagggcaa gaaggggacg gacctggtcg tgtgcaagga 300
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caagtgcacc gagcagaagg gcatcacggc 390

<210> 5012
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-G11

 <400> 5012

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 cgatcgagct caaggacagc ca 382

<210> 5013
 <211> 389
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-G12

 <400> 5013

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 tcctctctc caccaacccc agttagctca ccaccaccag cgccgaagtc gtcacctcca 180
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 cctgaagtaa agtcttcccc accaccagca ccgattagct ctccaccacc tccggccaag 360
 tcaccacctc caccggcccc tatgagctc 389

<210> 5014
 <211> 144
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-G2

<400> 5014

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tttaaaaaaa cttgtcaatc aatttcttaa ctcttcgctg ttgtttaaaa gagaagagtt 120
aagaaatgga ttgacaagtt atat 144

<210> 5015

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G3

<400> 5015

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cctcctcgtc atcgtggccg ccctctcggc gcgcgccgcg gcgcagctgc cgccggccgg 120
cggcgccctg aagccggacg tctatagcca gtctgtcccg gcgcgggagc ggatcattgc 180
ggaggtgatg cagacgaagc agatggcgaa cccgacgacg gccgcggggc tgctccgcgt 240
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gttcagaag tcggagcacg acgcggagat caaccactcc ctccccgggg acgccttcga 360
cgccgtggtg cgcgccaagc tggccctgga gctggagtgc cccgggggtg tgctctgcgc 420
cgacatcctc gcactggc 438

<210> 5016

<211> 88

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G6

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<210> 5017

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G7

<400> 5017

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 aggtcccgcc cttttccgac attcacaggg gggacaggaa atcagcggcc atggcctcga 120
 ttccggcgac gaccttcgcc gtcattttat ccgtcctctt ctgtgccgcg gctggcaccg 180
 ccgtcgacaa cgacctcccc gactacgtca tccaggggccg cgtctattgc gacacctgcc 240
 gcgcggggtt cgtgaccaat gtcaccgagt acatcgcggg cgccaagggtg aggctggagt 300
 gcaagcactt cggcaccggc aagctcgagc gtcctatcga cggggtgacc gacgggaacg 360
 gcacgtacac gatcgacctc caaggcaagc cacaaggagg acatctgcga ggttgtcttg 420
 gtggagagcc cgcgcaagga ctgcga 446

<210> 5018

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G8

<400> 5018

ccacgcgtcc gagccttggt cctcctggtc ctcttctgca tcgtgcatgg tgagaaggaa 60
 gagtcaaagg gcatcgatgc gaaagcgtcc gggcctgggtg ggtccttcga catcaccaag 120
 ttggggcgct ccggcaatgg caagacagac agcacgaagg ctgtgcagga ggcatgggca 180
 tcggcgtgcg gcggcactgg gaagcagaca atcctcatal ccaagggtga cttccttgtc 240
 ggacaactca acttcacagg cccttgcaag ggcgacgtga ccatccagggt ggatggcaat 300
 ctgctggcga ccacggacct aagccagtac aaggaccatg gtaattggat cgagattcta 360
 cgcgtggata acctggatcat caccggcaag ggaaaccttg acgggcacgg cccaaccg 418

<210> 5019

<211> 403

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-H1

<400> 5019

attcacgggt cgacccacgc gtccgngngt acctggcgcg gcgggcggcg cagaaggagc 60
gggtgcgcct gctctaccgc agggcgctca aggacacgct caactgggcc gtccaccgcc 120
acctcttcta ccaggacgcg tcggatctcc gggacaagtt cgaggccaac cgacacgtgg 180
ataacctgga cgtggtcgat aggtcatcg acgatgcgga ggctcagtac aggaacttcc 240
agcaccgccga tccctacatt gttccatggg caccaggcgg cactaaattc acaagaaacc 300
cccctccacc tcaagggatc gagatcatct acaattatgg caaggaggac cagtaaacia 360
gagtcctgca agcggnggca gaacttcac agttccaaat cac 403

<210> 5020

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H10

<400> 5020

aattccaggg tcgacccacg cgtccagcac actgtggcac tcagaacaga atccagcctt 60
tataacccaa ctacttctcc tagtcttggt gcatctgcac agggctctaca gaatgaggac 120
ttctccgcaa gccagctaag taaaatgttc ggatctcatg caacgatgat ggccaacacc 180
cttcgcacac caatcattgt atttacacag acaggctcca tggctgtcct cctgagccac 240
tatcgtccct cgtctacact atttgcattt acaaacgagg aacgagtga gcaacggcta 300
gcactctacc agggcgctcat ccctattcac atgcagttct ctgacgacgc agaagaaact 360
ttctccagaa caattaacag cttgctgaaa gcacaatatg tgaagaaggg agactac 417

<210> 5021

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H11

<400> 5021

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ctcgtcgtgg ccgccctctc ggcgcgcgcc gcggcgcagc aggtgccgcc ggtgggcggc 120

agcgctctga agccggacta ctacagccag tcgtgcccgc gcgcggagcg gatcatcgcg 180
gaggtgatgc agacgaagca gatggcgaac ccgacgacgg ccgcgggcat gctgcgcgtc 240
ttcttccacg actgcttcgt caccgggtgc gacgcgtcgg tgctgatcgc gtccaccag 300
ttccagaagt cggagcacga cgcggagatc aaccactcgc tccccgggga cgccttcgac 360
gccgtggtgc gcgccaagct ggccctggag ctggagtgcc ccggggtggt gtctgcgcc 420
gac 423

<210> 5022
<211> 397
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-033-Q1-E1-H2

<400> 5022

gtcgaccac gcgtccgaac ccctatcgca ccgcagccgc cggccatggc ctgcctcacc 60
gacctcgtca acctcaacct ctccgacaac accgagaaga tcatcgcgga atacatatgg 120
atcgggtgat ctggcatgga tctcaagagc aaagcaagga ccctctccgg cccggtgacc 180
gatcccagca agctgcccac gtggaactac gacgggtcca gcacgggcca ggcccccggc 240
gaggacagcg aggtcactct gtacccgcag gccatcttca aggaccatt cangaggggc 300
aacaacatcc ttgtgatgtg cgattgctac accccagccg gcgagccaat cccaccaaac 360
aagaggtaca acgcccgaac gatcttcagc agccctg 397

<210> 5023
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H5

<400> 5023

ccacgcgtcc ggtgagaacc atgtggtcgt cgatgcgggc acatggtgcg atggctgtgg 60
cgttggtgtt cttggtgagc ggcgcgtggt gcggtcctcc caaagtcccc ccaggcaaga 120
acatcacggc cacctatggc aaggactggt tggacgctaa agcgacatgg tatggcaagc 180
cgacgggtgc cggtcccgac gacaacggtg gcggtgcggt gtacaaggac gtgaacaagc 240

cccccttcaa tagcatgggc gcatgcgga acatcccat cttcaaggat ggtctgggtt 300
 gtgggtcctg cttcgagatc aagtgcgata agcctgtgga gtgctccggc aaccccgtag 360
 tgggtcacat caacgacatg aactatgacc ctatcgcggc gtacaacttc gatttagcag 420
 gcacggcggtt cggcgccatg gc 442

<210> 5024
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-C5

<400> 5024

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 tcaagtgcgc caacctgctg gtgaacaaca gcggcgagct caaggtggcg gacttcgggc 120
 tggcgaacct cttcgcgccg ggcgcggcg cgccgctcac cagccgggtg gtcacgtctt 180
 ggtaccgccc gccggagctg ctcttgggcg ccacggcgta cgagccctcc gtcgacctct 240
 ggagcgcccg ctgcgtcttc gcggagatgc acgcgcgccc gcccgctctg catggccgca 300
 ccgaggtcga gcagatccac aggatcttca agctctgtgg ctgcgccccc gaagacttct 360
 ggcgcgcgtt ggggctctcc caccggcgcg tcttcgccc gcagcaacct taccgagcc 420
 gcctccggga caac 434

<210> 5025
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-039-Q1-E1-C8

<400> 5025

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 ggagcgctcc ctccaacatc tgggagaggc agtacctcgg cgagcagctg tacgtgagcg 120
 tcatcccgcc ggagcggctc ctcagggacg agtacaacat gccggagacc agcctccgct 180
 gcggcaaggt cgtcggcctg ccgatgccac cgtcctaccg cgccgtctag agcgtcgacc 240

gatcgcgcac ggtgctgtac acaactaaag gagagcgaga ggggactttt tctcgcgttt 300
 ccttctctag ccagccttgt ctgtccctc ctcgtttatt ctctctctct cttttttttc 360
 gttcgcttcc gaggaataat agccaaaana aaaataaaca atggcgggcg ctctagatga 420
 tccaagctta cg 432

<210> 5026
 <211> 413
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-D1
 <400> 5026

cgggtcgacc cagcgtcta cacacacgtc tgcaattcgt tcctttcaca ccggagaccg 60
 gcgagcagag ccgcgcacag cagaacgcgg aagcaagagg aggcgatcga ctactcgacc 120
 agccctctcc gctcttgtct ccgatggcgg ctcgcgtcct cgcggccctc gcccttgccc 180
 tcgccctcgc cctcgtcgcc gtaccgcgtc ccacgcgggc gtccaacgac gagggggacg 240
 cgctctacgc gctgcggcag cggctgtcgg accccaacgg cgtgctgcag agctgggatc 300
 ccacgctcgt caccctctgc acctggttcc acatctcctg cgaccaggtc ggccgcgtcg 360
 tccgcctgga cttgggcaac tccaacgtct ccgggtccat cggccctgag ctc 413

<210> 5027
 <211> 361
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-D10
 <400> 5027

tcgcgggtcg acccacgcgt ccacggacgc ttgggcgacg ggcagggagc cctggtgtgg 60
 aacaagaacg agtgccagcg ttctacaac tgcaaaatcc tccccaacag cctggtgctg 120
 gacttcgtga cgaacgcccc gatccgcggc atcacgctgc tgaacagcaa gttcttccac 180
 atgaacatct tcgggagcaa gaacgtggtg atcgacaagg tgacgatcaa ggcccccggc 240
 aacagcccca acacggacgg catccacatc ggcgactcga gcaacgtgac catcagcggc 300
 accaccatcg ccgtcggcga cgactgcgtc tccatcggcc ccgggagcaa gaccatccgc 360

<210> 5028
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D12

<400> 5028

ctcgcgggtc gacgcacgcg tctgacacag acgtcctggt agggcatggg cgaagctaag 60
 ctcaacagcg tgaccgtcct gctggtggac ctccgcctcc tgagcagtgg cgttcaggac 120
 gctgccgcca tgccaggcac gttgaactac gacgcgattg tcgccgacga gccaaacgga 180
 aagaacaagg acctgtgccg cctcgtcgcc aacgccata gatacaccg cggtgctgag 240
 cccatagaac gctgcatggg cgcgcgctga tcagtaagca tatacatata gcacatcgat 300
 ttcttaatat tgcattgcac tgtatataag tgctcattgt cttgctgttg taagtgccag 360
 cacaagcata tgtacggcgt ttatgtata 389

<210> 5029
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D2

<400> 5029

gctgggtcgac ccacgcctct acacatggct cctactacat cgtgcccgcac ctccctcttct 60
 tcggcgcttc ctgcacgcgc ctaccgatc gctccgacgc cgtcgaggtc tccgccatca 120
 aagccgccat ggacgccatc ggggtcccca tggtcggcct cgtccgcgtc agctacggcg 180
 gcttcgtcgc ctaccgatg gccgccatgt tcccggaggc ggtccaccgg gtcgccctgg 240
 tctgcgctgg ggtctgcctc aaggatatag acctggcgga gggcctcttc cccgtggcct 300
 ggatcgggga tgccgcccgc ctgctcgtgc cgcacgccc ggaagaagtg cgccgcctac 360
 tccgcctcag cttcgcgcgc acgcacctca tcatgccctc ctgcttccta tgcgactaca 420
 tcaaggt 427

<210> 5030

<211> 170
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-D3

 <400> 5030

 gggtcgaccc acgcgtctaa agacacttgg gccaatcaga agctcgctct ctaactgact 60
 catggggaga gttcttttgt tggacggaga gttcaaaatc caaaaatctt ggtgtatgta 120
 cagttgtcta tgaggaatac taacacgtct tgcagtgctt ctgcctctcc 170

<210> 5031
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-039-Q1-E1-D4

 <400> 5031

 cgggctcgacc cagcgtccg aacacgcttc cgctcggcga cagcgacggg gaaggcttga 60
 gcctcgctct gtacttcagg gtgtccgaat gctacgacaa ggaggtttcc gaacatttca 120
 aggagtctat gatgagggtt ttcgaggacg aaaccgagaa ggtgaaaggg ttcacgtcag 180
 aatccactgt gagctacaga gatcggctga agatcatggc cggcctggtc aaccgggacg 240
 acctccagct gggctctacg gagaggaagc tcgtccaggc gtacaacgag aagccagtcc 300
 tctcggggcc ccagcacagc ttctacgagg gagaggacta ccttgagggtg gaccttgaca 360
 tccaccggtt cagctacatt gctaggaang ggctggactc gttcaaggca cgcctcaag 419

<210> 5032
 <211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-D7

 <400> 5032

 acaaccctct agagtgagtc gtatgtaact acgcgcggca cgagatggac gtggtgaagg 60
 accacgacat gtggcagtcg ccgagcgagt gcgccgggga gatcaaagag gcgctcgacc 120
 acctgaacga caccgagggc ggcctcgacg acagcaagct ccacgacgtg aacctgtgcc 180

tggacacggc ggaggaggac acgtggctct gcgacgtctg ctgcaagcac gccccatcca 240
 ggcccgctcaa aaccacgctg ctgccagga tcaaggactt cgacgcgctc atgcgcgtca 300
 cccacgcgct catcaagcag gccactggtg gcgccggtga cgcgccggcg ccggcgcacg 360
 ccgtccgcgc caag 374

<210> 5033
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D8

<400> 5033

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 gcacgtccgc ggccctgcagg tccgccgcgc cgccgccgac gactgggtca acgtgcaggc 120
 cgtccgcgac gccggcatcg tcaacgtcgg cgaccaagtc gagagactga gcaacgccgt 180
 gtacaagagc atggagcacc ggggtggctgt gaacgccgac gaggagcgca gttccctcgc 240
 gcacttctac aagcccatgg gcgacgtccc catcgcccc gcgccggagc tgggtggcggc 300
 tgtgagcctg ccggcgctct acctgatgag gatcgtcgac gagtacaggc tctacgtcga 360
 gaagaatggc gccagcggca acgaggacat cgag 394

<210> 5034
 <211> 315
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D9

<400> 5034

acaatactct aaagtgagtc gtattaagag gagccattat ctccagcctc gcgcccagtc 60
 tctttctcgt tatggtgccg tttcttcatt accatggaca aagttttctg tcggtctgtc 120
 ggcagccgct ttctcggact caacaagact gtaatgtcta ctgttgctat gtaatgcttc 180
 tcaattgtca ttttggacac atgtgcgacg tatacagttt taatgagatg tctgatgagg 240
 ctacttgcaa cactacatgt ggtgttctca atgaataata tcaattgttg agctctcatt 300
 aaagaaaaac tgctc 315

<210> 5035
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E10

<400> 5035

tgcgccgtcg acccacgcga ccgaccacgc gtccggggcgg cggaagccag gaggctagcg 60
ccgcggaggc ggaggaggaa gtggtgagac tgtcaccgga gctggcgatg cacggcgcca 120
tcgaccgggt gacgctgccg tcgtcgacgt cgaagcggcg cctgtccatc agcgtgagca 180
agaagctgag catgaacatc ccggacaagc tgcggctgag ccggcgggag cacaaggacc 240
accaccacaa ggtggagtcg gaggacacgc tgtggaagaa gggcatcatc ctcggggaga 300
agtgcaggat cccggggcga agggatgcgg agaccggcga gcccgctcac cccgccgacg 360
agatcgccgc c 371

<210> 5036
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E11

<400> 5036

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cttcctagct gggggtgctc tctaccgttt cgagtacgca gtcaaccggg cgctcttcct 120
cgccaaagcg cgaggaggga cgtgcacgct cgctccctct gaccctgacg acacggtggc 180
tcgccgcgcc agatacctgc tgagcaacgg ttccaggtgc tacaacctgt tcaagagcaa 240
ctgcgaggac ttcgcgatat actgcaagac tggccttctt gtcgctgagc agggcgttgt 300
cgggcagagc gggcaggcta tctccatcat cggtggacct ctcgccgcgg tgggtctcac 360
cccattccgc ttggttacca cgaacatcta tgggatggcg gtga 404

<210> 5037
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E2

<400> 5037

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gacggcgacg gcatcacctgt cttcggctcc accaacgtgt ggctggacca cctctccctc 120
tccaactgcc aggacggcct catcgacgtc atcgccaagt ccaccggcgt caccatctcc 180
aactgccacc tcaccaacca caacgatgtc atgctcttca gctccagcga caagcatccc 240
gaggaccaga tcatgcagat cactgtcgcc ttcaaccact tcggcagagg cctcgtgcag 300
aggatgccaa ggtgccgctg gggcttcttc cactgtgtca acaacgacta cagcactgg 360
ctcatgtacg ccacggcggg cagcaaggcc cccaccatca tcagccaggg caaccgctac 420
atcgcgccgc cca 433

<210> 5038

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E3

<400> 5038

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ggcgtgatac ctgttcttca caagctggtc ctcttctggc accaaccgga ggcattgcac 120
acgaccggat acgaaattct gatggggctc ttctacgggc tgggagcatt ggtatatgcy 180
gcacgggtac ctgagcgctg gatgcctggg aagtttgaca tcgccgggca cagccaccag 240
ctgttccacg tcttggttgt tgccggagcc tacacacact accacgcagg gcttgtgtac 300
ctcaagtgga gagacctgca aggctgctga aaggctgtgc atcgttgagg atgtggatag 360
attgtagatt ccgtgaattc aggctgaagg tcatggctctg ttgtaaattg taacagtaat 420
catgaaacaa t 431

<210> 5039

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E4

<400> 5039

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gctggtcgcc gttgctaccg gtggccgccg atgtcgccaa cgccggccac gccaagcccc 120
tgacgcctgg cgggcgcggtg gtacaccaca accacggcaa gttcacggcc gggccgtgga 180
aaccgcacca cgcgaccttc tacggcgggc gggacgggtc cggcaccacg gcgggcgcggt 240
gcgggtacaa ggacacgcgc gcgcaggggt atggcgtgca gacggtggcc gtgagcacgg 300
tgctgttcgg tgacggcgcg gcctgcggcg ggtgctacga agtgcgctgc gtggacagcc 360
ctagcgggtg caagcccagc gcggcgacac tggtggtgac ggcgaccgac ctgtgcccgc 420
ccaacgacca 430

<210> 5040

<211> 268

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F11

<400> 5040

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cgaataacta ataacatctc ctcgagcgcg aggccggctt ccttggacca atccagcagc 120
aagcgaccgg gccagcacca gcagccatgg agatgaagaa ggtcctctgc gccgcgctcg 180
tcgccgccgc ctccgccacc gccgtgctgg ccgaggtcgc ctccgagtcg ccctccgagg 240
cgccccccgg cgcgggccgt ctagagga 268

<210> 5041

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F12

<400> 5041

tacaacaccc taaactgagt cgtattatcc tcgaccacct caacgagctt ctgctccgac 60
gacgacgacg tgccgccaca tccacatggc ggacgacgcc gtcgccggcg gagcggccgt 120
tcgctgcgca gggccggcgc cggcctcgct gtcttctagc aggaagcagc agcagcagcc 180

cgacgacgcc ggctgcgcca gcagcgacga ccactaccag cacgacgtga tcatgctgag 240
 gcggacgagg agcggggcggg cgttccccgcc gccgatctcc gtgatcggca agggcggggcg 300
 gccgtggctc tgccctgcggg cgcaccgcga ggggtggacgc ctcgtgctgc ggcagatgcg 360
 cctgccg 367

<210> 5042
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F2

<400> 5042

gcgtttcgac ccaagcctct aaagtaagtc gtattaaaca aaacataaac caagaaaaaa 60
 aaagaaaata acagttacac aaaagcaaca aaaacaaaga tgaacatgaa caaaaggggg 120
 gccgctctag aggactctac gctgtacatc cccatccagg caacttccca acccgctcaa 180
 aatgtcacca atgttgattt cacgggcatt acttttaacg cgtccaacca tggaaaaagc 240
 ctggcttaat gtaactgaat ccctttgcga caaatgcccc tttctgaagc tggagtaaaa 300
 acaaacaggc cggcaactat cgcctttcct aacatttgcc ccgccgcatt ggcaatcgga 360
 acgcccattg tcccggccca ttaaccgcg 389

<210> 5043
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F4

<400> 5043

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 gtaggcgttc aaaccatctc gtagattcag ccattcccgt taccattcct acgctagtca 120
 taatcatgca tgcgctgtga tccctcccaa cttgcagaag aaatgggttct gctgtgtctc 180
 gccagtcctc acacagtctt gaggaagcta atgagccgtg cagtgtctga gcagtttctg 240
 tgatggttat gtgtagctct tcgaattcaa tcctatactg cttgccagtg acaggggctc 300
 tatgtatagc cattgcaaata gagaaaatta ctctgatggg tgtctgctta tagcgttctt 360

agctgtgtat accatcagtt caagctgatg tctgcttgta attttctttt ctgggccctt 420
ctcta 425

<210> 5044
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G11

<400> 5044

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cggggccctt gcacggcgac caaccccatc gaccagtgtt ggcggtgccg ccgcgactgg 120
gcccgcgacc gcaagcgctt ggccaggtgc gccatgggct tcggccacag gaccaccggc 180
gggctggccg gcaagttcta cgtgggtgatt gacccagcg acgacgccgc cgacctcgtc 240
accccagga agggcacgct ccggcacgcc gtgacccggg cccgggcgct gtggatcacc 300
ttcgcgcgcg acatgggtgat cgagctctgc caggagctca tcgtgagcag cgacaagacc 360
atcgacgggc gccg 374

<210> 5045
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G6

<400> 5045

cccacgcgtc caggcgccgc cgattgttca tcccgcacga cggctgggga acagtggaag 60
acgccggttt cagatctgcc gtcgtcatcc atggcggtgg cgctccgtgg tctcattggc 120
gcccgtatcc gtggtggcct cgggtgcgtg ccccgcccat ctacgccgcc ctgaaacaat 180
gggtgctgac tgtgtcgtc agcccatatg tgccgcctg ctatttaatc tgcacattat 240
ccttcaccac ttgccaaagg aatctcatcc acgaagtgt actgtgatat tgttgcccgt 300
gttttttttt ctttctgctt ggaatcctct cggacggcat acccacgtaa acgaagtgt 360
acttgccctg aagaatatct caagtgtcaa aggattgatt attattcttt gttt 414

<210> 5046
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G7

<400> 5046

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aagctcaccg cacctcccct cctcgccgcg gatccccac tactccggta gaaaatggct 120
gacgctgagg atatccagcc cctcgtctgc gacaacggaa ctggcatggt caaggctggg 180
ttcgccggcg acgacgctcc gagggccgctc ttccccagca tcgttggggcg cccgcgccac 240
accggtgtga tgggtggggat ggggcagaag gatgcctacg tcggcgacga ggcgcagtcc 300
aagaggggta tcctgaccct caagtacccc atcgagcacg gaatcgtcag caactgggac 360
gacatggaga agatctggca tcacaccttc tacaacgagc tccgtgtggc tcccag 417

<210> 5047
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G9

<400> 5047

ttacaacacc ctagagttag tcgtattaga cactcaact tcacaggccc atgcaagggc 60
gacgtgacca tccaggtgaa tggcaatctg ctggcgacca cggacctaa cagtagaag 120
gatcatggta attggatcga gattctacgc gtggacaacc ttgtcatcac cggcaagggg 180
aagctcgacg ggcagggggc agccgtgtgg agcaagaact cctgctcaa gaagtacgac 240
tgcaagatcc ttcccactc gctggtgatg gacttcgtga acaacgggga ggtgtccggg 300
atcacgctgc tcaactccaa gttcttcac atgaacatgt acaagtgcaa ggacatgctg 360

<210> 5048
<211> 296
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-H11

<400> 5048

gtgagtcgta ttagaacgac caacgccatc agcggccgcc gccacgacgg acgagtcgcg 60
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 ccgtcacctg cgggcggggtc gacgacgacc ctcggtcgat ctgggttcaa tagccccctg 180
 tcagtcacaa tcgtaagcgc cacggtcgca gtggagtcgc tcctcgata ttctattcag 240
 atgcccgcga gagcaggagc atcaacgggc cggagcagat gaaggtggac ggagat 296

<210> 5049
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-H4

<400> 5049

accacgcgt ccgagatcaa gcacgtcca cctcaccgc cggacagcag ctgctggtcg 60
 ccatgctagc agtggtcgcc gatgtcgcca acgccggcca cgccaagccc ctgacgcctg 120
 gcgggcgcgt ggtacacgac aaccacggca agttcacggc cgggccgtgg aaacctgccc 180
 acgcgacctt ctacggcggg cgggacgggt ccggcaccac ggccggcgcg tgcgggtaca 240
 aggacacgcg cgagcagggg tacggcgtgc agacgggtggc tgtgagcacg gtgttggttg 300
 gcgatggcgc ggcctgcggc ggggtgctac aggtgcggtg cgtggacagc cccagcgggt 360
 gcaagcccga cgcggcggcg ctggtggtga cggcgaccga cctgtg 406

<210> 5050
 <211> 209
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-A11

<400> 5050

acaccctaga gtgagtcgta ttaacgacct ctctgctgt cgctgctggt cgccatgcta 60
 gcggtggccg ccgatgtcgc caacgccggc cagccaagc ccctgacgcc tggcgggcgc 120
 gtggtacacg acaaccacgg caagtacacg gccgggccgt ggaaaccagc ccacgcgacc 180
 ttctacggcg ggcgggacgg gtccggcac 209

<210> 5051
 <211> 216
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-A12

 <400> 5051

 ggggtccatcc acgcctctaa atggcgtcgg cgacgactgc atctccatcg gccccgggac 60
 ctccaaggtg aacatcaccg gcgtgacctg cggccctggc cacggcatca gcatcggaag 120
 cctagggcgg tacaaggacg agaaggacgt cacggacatc aacgtcaagg attgcactct 180
 taagaagacg atgttcggcg tccgcatcaa ggcgta 216

<210> 5052
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-A5

 <400> 5052

 ggggtcgaccc acgcgtccga ttatcagttc tttctctacc aactgatccg tgctctgaaa 60
 tacatccaca cagctaacgt ttatcaccgg gacctgaagc caaagaatat attagcaaatt 120
 tctaactgca aactgaaaat ttgtgatttt ggactagcac gagttgcatt caatgatacc 180
 ccaacaacga tcttctggac agattatgtt gcaacaagat ggtacagagc tccagagctc 240
 tgtggatcct tcttttcaaa gtatacaccg gccattgaca tttggagcat tggatgcac 300
 tttgctgagg tgtaaacagg gaaacctttg tttcttggtg aaaatgttgt ccatcagttt 360
 gacttaatga ctgaccttct aagcacgcca tcgatggata cgattt 406

<210> 5053
 <211> 61
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-A9

 <400> 5053

 aatagcgact cactagtgtg tctgcgtatt gtcttacaac accctataag tgagtcgtat 60
 t 61

<210> 5054
 <211> 209
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-B10

 <400> 5054

 acaacactct aaagtgagtc gtattaaaca tagcagcagc actcacaata gcaaaaacca 60
 ccatccgtcg tcgccaaccg tagcaaggag ccaaggacat caccaccgcc cagcaataat 120
 ggcgagagc atgaggattg tggcgctggc ctggtggcc ctgctggtgg tggcggcggc 180
 ggcgcccgtg gccaccgctg acggctgct 209

<210> 5055
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-B2

 <400> 5055

 cgggtcgacc cagcctcta caggttctcg acgaacgtgt ccaggagcgt ggccggcgcg 60
 acggtggagg tgggtgtgccg gcacttcggc gcgtccaagg agacgctcaa ggcgaggcg 120
 acgacggacg acagcgggtg gtacaagctg gagatcgacc aggaccacca ggaggagatc 180
 tgcgaggtgg tgctggcccc gagccccgac ccggggtgcg cggagatcga ggagttccgc 240
 gaccgcgcc gcgtcccgtc cacctccaac aacggcatca agcagcaggg cgtccgctac 300
 gccaaaccca tcgccttctt ccgaaggac ccgtcaagg agtgcggcgc ctcctcgag 360
 aagtacgac tcaaggacgc ctccgagacg ccatgat 397

<210> 5056
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-B3

 <400> 5056

 tacaacacc tatagtgagt cgtattaagc catgacgatg acaatagccg ccgtgctctg 60

cctgctcctc ttctctggcc gtctcgccgc ggcggagaag actttccgcg gaggcggagg 120
 cggaggctac ggcgggttgg aggcgggtgg cggaagcggc ggcggcggct actccacccc 180
 gagcgaggca gcgccatcca cgctgccgc tggggagacg acgaccctt cgtcaggcgg 240
 cggttactcc acccctagcg aggcagcgcc atccacgcct gccgctgagg agaccacgac 300
 gactccttcg tcaagcggcg ggggttaccg cggtgcaacc ggcaaagctt cctcaagcgg 360
 cggcgggctt ggaccgcgacg gggac 385

<210> 5057

<211> 235

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B5

<400> 5057

tgcaacactc tatagtgagt cgtattaacg cgtgggcggt cgaagcccc gctggcgccg 60
 ccggcgcccg cgccggcacc gggagcgccg ctgggccctc cgccagcggc gccgcgcccc 120
 cgctcaccgg cgcgccgggc gcgttcctgg tcccgctacg cggcgactac ctgcactaag 180
 cagatggacg gatggacgct cgcatggcat tggcatgcct ggagtgttga acatc 235

<210> 5058

<211> 225

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B6

<400> 5058

gatacaagca tctacagtga gtacgtcatt actaccagtt ctattggtgt tggcgctac 60
 cttctctata aataatatct aactccaaca agatatgttt gatgatggat cgcgatctat 120
 catatgtatg ccattcattc gttaatttga aaagatgatg ctgaaaaaga gaagctacac 180
 tagaagaaga aaacgaaagg gcggccgctc tagaggatct aaacg 225

<210> 5059

<211> 202

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C10

<400> 5059

tacaacactc taaagtgagt cgtattaatc cgccgccgcc gccgctcgtc tccctgagag 60
gtgccgggac cgaggaactg gccgagtact aggtagagaa tcggtttttc ttgtctcagc 120
ccgggggtctg ctgctgtctgg tgggtggtgaa ggggagaaat tcgtgagatc tgttccggat 180
caggcgtgcg agctcgggaa tc 202

<210> 5060

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C4

<400> 5060

cgggtcgacc cacgcgtcca agatcacgac aagatggcat gcacaaacaa tgcatgaga 60
gccttggtcc tcctggctct cttctgcac gtgcatggtg agaaggaaga gtcaaagggc 120
atcgatgcga aagcgtccgg gcctggtggg tccttcgaca tcaccaagtt gggcgcctcc 180
ggcaatggca agacagacag cacgaaggct gtgcaggagg catgggcatc ggcgtgcggc 240
ggcactggga agcagacaat cctcataccc aagggcgact tccttgtcgg acaactcaac 300
ttcacaggcc cttgcaaggg cgacgtgacc atccaggtgg atggcaatct gctggcgacc 360
acggacctaa gcc 373

<210> 5061

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D2

<400> 5061

gtcgatccac gcgtctaccc acacttctgg caccgccac cggccggatc gacagcaccg 60
atcacctga ccgtctgcgc gggcggtc tcacacaccg gcgacacgca gggcgcgcat 120
aggcgagggc ctcccccccg gcgagggatg gtgtggtcgg ctgggatggc aacaatgcga 180
ggcgctccg ccgccgcgt actggtgctg gcgctcgccg ccgccgtggc gcgcgaggag 240

gaccctacc acttcttcga gtggaaggtg acgtacggga cgaggaccat catggggacg 300
 gcgcagaagg tgatcctcat caacgacatg ttcccgggcc ctaccatcaa ctgctcatcc 360
 aacaacaaca tcctcgtcaa cgtgttcaac atgctcgacc agccgctcct 410

<210> 5062

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D3

<400> 5062

gcgggtcgac ccacgcgtcc aaataaatca cctcaatgat aaccagaaaa cgcagcaggg 60
 tagtacatga tcgcccgac aaacagtggc gcgtcgaagc acgtaccacc accaccacgc 120
 gcacacctcc tcgccgccg cggccgactc catacatata cagcccgcc gacacctcac 180
 acagagacac acacgacacg agctggactc acgcacgcca gaccagacga atcatatttt 240
 ggagcaggaa ccacgtatcc agcgcggatc tagcagaaga ggtagccgaa ggcggcggcg 300
 gcgagggagg ccgcggcgag gggtacggcg gccgctctag aggattca 348

<210> 5063

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D4

<400> 5063

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 gattgtaaaa tctcatggcg tatgtttaga gggtatcaga tggggtggtt caagcagacc 120
 tgacttcaca tgtaaaagta ccaaagtcgt cctgggtgtc gtgcacgcca ctggagatga 180
 accttacatc ccattctccc atccatttgt tttaagagat gctggtggtta aagttaattg 240
 tgatggatcc aagaagacag agaacatgtg attgacctaa ggcagtttca gctccagaga 300
 aggtccatta ctcatggaaa tgctaagagc aagagtgaaa agttccctac cctcacatta 360
 aggtggtacg gttggtgt 378

<210> 5064
 <211> 390
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-040-Q1-E1-D5
 <400> 5064
 ctcgcggggtc gacacacgcg tctacacaca cgtctgccaa cgcgtccgag cctgtacatt 60
 ctctctctcc tcctctcgcc ttcttcgcgt gtttccctct ttttcttagg ccgccctcta 120
 cacttctcga cataaccatc gagagggcgg tcgagagaaa cgagagcggc agacaccatg 180
 gggagctcga ggaccatcgt tgcgtccccc ctgctcctcc tcgccctcct cctcctggct 240
 ttgcgggcca ccgccgaggc ccgcgttgct cccgagctgt ttggcgagga ccaattccag 300
 cggacatgca accaggtgca cttcaggaag atgtgccaga gcttgacgag gctcccagg 360
 gtgaccacgc cgcgcgagct gctgctggcg 390

<210> 5065
 <211> 331
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-040-Q1-E1-D6
 <400> 5065
 actcgccggt cgacacacgc gtctacagga acacatagca agctagccag ccagccagca 60
 gccagcttgc tcgccgcgcc cgctcttctt cctcgctcct gttccgttcc gttccgtccc 120
 gcccgcgggc ggcgcgcaa tcaaggaagg agatgaagaa gattgcctgc gccgtcctcg 180
 tcgccgcctc ggcgggcaac gtggcgctcg ccgcggaggc tcccgggtccc gggcccaaca 240
 gcggctcctc cgccgtcgcg cccgccgtcg gcgccgcctt cggggccgcc gtcgcctccg 300
 tcttcgccta ctacattcag tgagccgggc g 331

<210> 5066
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-040-Q1-E1-E1
 <400> 5066

gcgggtcgac ccacgcctct agcgggatcc gatccatctt gggcgggcgc cgcgcgtcga 60
 gggccagcca aagcttgcca tggcagccgt ccggtccgac aggggtccacc accaccaccg 120
 ccgctccgag gcgtcgtgcc cggcaacctc cgcggccgtg gcggcggcga gggccgatga 180
 cgccctgcgc cagcgcgccgc gggggctcgt gcaggtccgg gagcgggatc agggcccgt 240
 gtcgacgggg caccagcacc tgcaccacca tcaccaccag ctgcggcggt cggcggcggtt 300
 cccaccccgc cgcccggggc cggggcgccg ccctcctcag cgctgcgaaa gcgacctcaa 360
 catcagggag caccgctcct gc 382

<210> 5067
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E3

<400> 5067

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 caggtgggtca ccgcgcggcc acccatgggg ctacgcacac acgtcgagaa ggccatcgac 120
 gcgggcacct ttgagcagat gctcgacatc accgtcaagg actggcccgt cgaggaggcg 180
 ctgcggctacg ccaagctcgc gctcaagtgc acggagatgc ggcgaggaggga ccggccggac 240
 ctgcgccacag tcatactgcc ggagctcaac cggttaagga acctcggcca cgcgtagcag 300
 gcacgcatga gcgccgccag ggccaacggt ggaagtggag agagtgggtgc ccagatcagc 360
 ggggactcga c 371

<210> 5068
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E4

<400> 5068

gggtcgaccc acgcgtctac ccacgcgtcc gagagcaccc tgtgctgctg accgaagccc 60
 cactcaaccc aaaggctaac agggagaaga tgacccaaat catgtttgag actttcaatg 120
 ttcttgccat gtatgtcgcc atccaggctg tgctttccct gtacgccagt ggacgtacaa 180

ctggtattgt attggactct ggtgatggtg tcagccacac agtgccaatc tatgaaggtt 240
 atgcccttcc tcatgccatc ctgcgccttg accttgctgg gcgtgacctg actgacagcc 300
 tgatgaagat cctcactgag agaggttact ccttcaccac ctctgctgaa cgcgaaattg 360
 taagagacat caaggaaaag cttgcatatg tggctcttga atacgacc 408

<210> 5069

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E5

<400> 5069

acaagcctct agagtgatcc ttaatgcttt cgagtagcac ctccagggtcc tgggttcgat 60
 ccccctcggg ggcgaattta tggttgggtt aaaaaaatcc cctcgttgtg cccacccgc 120
 tcccgggtta cgtcctgcgc gccaccctcc ggctgggccg ttgcagagtg ggcggtgacg 180
 gcccgcctagt gatggggggc caaggtttgg ggattttctc ggccgggacc atgagggcgg 240
 tctttccctc cccggccgag ttttatataa acaattttta aaaaaagac aaaaaaaaaa 300
 aaaaaattca ac 312

<210> 5070

<211> 199

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-F11

<400> 5070

acaacactct atagtgagtc gtattagcca cccttttttt tttttttttt tttttttttt 60
 aggcccaatt agaaaagggtg gtttccatca aagaaccggg tggagggaaa ataatgggag 120
 acatcgaaag ttaatttgtt acatggtgtg gccgggtcaag agtgtctctc ccgacctatt 180
 gcaaaacggt aaagaattc 199

<210> 5071

<211> 212

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-F12

<400> 5071

ccttccaact ccctaattgtg agtcgtatta acggcggaaa gggagctcaa ggcggcggag 60
gaaggcggtc gccacagtcg ctgatttccc tggggaagag atgggtctct cctttgggaa 120
gctgttcagc cgctcttcg ccaagaagga gatgaggatt ctcatggtcg ggctcgatgc 180
cgccggtaag accaccatcc tctacaagct ca 212

<210> 5072

<211> 179

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-F6

<400> 5072

tagtgagtcg tattaaacgg cgttgccggc gaggcaccag ggttggggcc gggagcatgt 60
tcacgcgtgc ctgttcgcgc taaggcgagt agacggatgg cagtgtcgca gggagctgtc 120
gtagtcgtgt ttctcggcgt cgcagcgggg tgggaacgat cgatgccaga gtggggagt 179

<210> 5073

<211> 400

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-040-Q1-E1-F8

<400> 5073

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gcaggccggc tggccggtcg tcgatcgagg aaccaagctg ctgctgctgc taccggacga 120
caccaaccat gatacggagg acgacggtgt gcctaggcct gctgcttcta ctactggcgg 180
cgtcgactgc gacggcacat ttctcgatcg gcgacgtgga cgagtacttg aacaggcgca 240
cgcaggagtc ccgccacagg aaccacggcg gcgcgcagat caatgacctc atctccagt 300
ctgcgcgctt ccacgccaac gtggatgcac gcgcgtatgg tcgccgctcc aacctgcagc 360
tgcagganga ggaagcagca gctaccgcgg ggcgtgttac 400

<210> 5074
 <211> 209
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G11

<400> 5074

tacaacactc tatagtgagt cgtagtaagt cttctcacgt gtgaaaacat tgcaaataaa 60
 gaaactaatc actgaaagta ctgtctatga tgctcgtacc aggctgccat ccattatgcc 120
 caatcttgaa actcttgtca taaactcatt tgattgggtt gttgatgcac caatgctgcc 180
 taccaaattc ctctgtctta agcacctga 209

<210> 5075
 <211> 205
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G12

<400> 5075

aacaccctat agtgagtcgt attaacgaga acctttctcc ctctccacc tttctccttt 60
 tcttgccacg gcaaaacacc ttcgccggcg agagcatggc gatggcgtag cgtgtcctgg 120
 aggtcaccct ggtgtcggca aatgacctca agaaagtgtc gctcttctcc cggactcgca 180
 tctacgccgt ggcttccatc tccgg 205

<210> 5076
 <211> 366
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G8

<400> 5076

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 aagcctcccc gaccgccaca tctattaggt gcagccatgg gtgcctgtgc aacgaagcct 120
 aagacgcttg aggggaaagc ccagctgag gccaccatct ccacacccaa ggttgacact 180
 gagaccacta ccatccacat tgagggttgcg gcaaaacatg cagtagttga gaaggtggag 240

gaggacaagg aggaggcact aacagtggcg gcgaaacaag agccagcagc caccattgag 300
 cctcagcaga ttgctagtga ggtgaccact tcggaagtgg cggtcgtcgt tgtcgagcct 360
 gagaac 366

<210> 5077
 <211> 75
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G9

<400> 5077

ctatactgag tcgtaataaa tcgccgagag cgatcgagag ataaataaag ataaagaaag 60
 tggcatcatc gtcag 75

<210> 5078
 <211> 294
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H1

<400> 5078

acgtcgtaga actatgatgt gcccttgctt gattcgttat tgggtctcta gccagaaga 60
 tgaagaacaa caacaacaac aaaaatatat atatggtgct gcgtatgcc attgtaacag 120
 ttgatgagat ctgtgactcc ccgtgccgtg tcccgtagt tgctgatgat ttcaccccc 180
 ccccccccc cccaacaca cacacacttt ttttaacttt tccccttatt atgggggtccc 240
 aaattgatgc ggagatctcg agcgactctg caaatttcag atgagtggac aaaa 294

<210> 5079
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H3

<400> 5079

gggtcggccc acgcgtccaa agacgatgac cgggacaagg tgggtgctcgc gtcggacgac 60
 gacctcgcgg cggcgggtgga acacgccagg ctcgccggat ggaaggggtct gaagctgttc 120

ctggactact ccggcaccac cgggcgcagg aaagcgggtgg ccacccacg tggcgccatg 180
 gcggtgggca tgtccagccg ggacgcgtgg gcggcggcgt acagcggggg cgccgccggg 240
 gctgccctcg tcaactggcat cggcgtcacg gcgtacctgc gaagatctgc ctagctagtg 300
 tgggtggcgcg gcggcgcggc gcgcatttc gccaatgcaa gagcaagggg ttcctgtcct 360
 gccttcgaat caccacagag gtgctagtat gtgtggat 398

<210> 5080
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H4

<400> 5080

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 aggtgctcgt ggagatggag atccccggaga tctacattga gtcgctgcca aagaaagggg 180
 agacgagcct gggcgacgcc atctaccgga gcatcaccga ggaaacgttc gaccgcgtgg 240
 agttcttggc cgggatggac ctttcgacgg agcacaaggt gctggacctc aagaaccgca 300
 tcgaggcctc caccgtgacg tggaagcgca agatgcagac caaggactcc aagtcctcgt 360
 ggagctccat cgtcagcttc gagaagcgcg agca 394

<210> 5081
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C2

<400> 5081

cggctcctaaa tatcccgggt cgaccacgc gtccgatgct cttctctgcc tgcctgagct 60
 caccgcacct cgctcctca ccgcgtttcc tccgttaac cggtagaaaa tggccgatgc 120
 cgaggatata cagccccctg tctgcgacaa cggaactggc atgggtcaagg ctgggttcgc 180
 cggcgacgac gccccgaggg ccgtcttccc cagcatcgtg gggcgcccg gccacactgg 240
 tgtcatggtc gggatggggc agaaggacgc ctacgtcggg gacgaggcg agtccaagag 300

gggtatcctg accctcaagt accccatcga gcacgggatc gtcagcaact gggacgacat 360
 ggagaagatc tggcatcaca ccttctacaa cgagctccgc gtggctcccg aggagcaacc 420
 cg 422

<210> 5082
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-047-Q1-E1-C3
 <400> 5082

cgggtcgacc cacgcgtcca cccacgcgtc cgcccacgcg tccgcccacg cgtccgcca 60
 cgcgtccgcg ccgacatcga ccctgaccgc ctaccgcaa tctgtacga agacgaggac 120
 cgggacaagg tgggtgctgc gtcggacgac gacctcgcgg cggcggtgga acacgccagg 180
 ctgcgccgat ggaaggggtct gaagctgttc ctggactact ccggcaccac cgggcgcagg 240
 aaagcgggtg ccacccccacg tggcgccatg gcggtgggca tgtccagccg ggacgcgtgg 300
 gcggcggcgt acagcggggg cgccgccggg gctgcctcgc tcaactggcat cggcgtcatg 360
 gcgtacctgc gaagatctgc ct 382

<210> 5083
 <211> 436
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-047-Q1-E1-C4
 <400> 5083

gggtcgaccc acgcgtccga acaggagaa gatgaccag atcatgttcg agaccttcaa 60
 ccccccgct atgtacgtcg ccacccaggc cgtgctctct ctgtatgcca gtggccgtac 120
 cacaggtatc gtgctcgact cgggagatgg tgtgagccac accgtcccca tctacgaggg 180
 atacgccctc cccacgcca tccttcgcct tgatctggcc ggtcgcgacc tcaccgacta 240
 cctgatgaag gtctgactg agcgcggcta ctcttcacc accaccgctg agcgggaaat 300
 catgagggac atgaaggaga agctgccta catgcctcgt gactacgacc aggagatgga 360
 gaccgccaag accagctctt ccgtggagaa gagctacgag ctccccgacg gacaggtcat 420

caccatcggg gccgag

436

<210> 5084

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C5

<400> 5084

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ggctcctcca agatcagcat cctcaactcg accatcggca ccggcgacga ctgctctcgc 120

attgggcccg ggtgcaacgg cgtcttggtg gacagcatca cctgcggccc cgggcagggc 180

atcagcgtcg gctgcctagg ccgctacaag gacgagaagg acgtgagcga catcacgggtg 240

cggaactgcg tgctcaagaa caccaccaac ggcgtgcgca tcaagtcgta cgtggacgcc 300

gagtcctgctc tgacggcctc ccattctacc ttcgagaaca tcacgatgga ggaggtggcc 360

aaccccatcg tcacgatca gtacttctgc ccgcagaagg tatgccctgg c 411

<210> 5085

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C6

<400> 5085

gaccacgcg atccgaaatg agtcgtatat aagaaaagaa taaaaataaa aagaacaaaa 60

aaaaataaaa ataatcaaaa caaaaaggga ggacgagcga caagtgtcgt ctcgtttgtg 120

cccgggtgtg caagtagtct tgggtgttcag tatcgtctgc ggcttcgggt tcagggtcag 180

tgtcttttgc ctatgccgct tgtaagacct ctgggatttg agcgatatca cggtttgga 240

ctgcttgctc tttagcatca ggaacgtgcg tgcgcatcag gtcgtacgtg gtcgccttgt 300

cattgctgac ggactctcat ctcaccttcg agaccatcat gatggcgga 349

<210> 5086

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C7

<400> 5086

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acctgcattc acggcgggtat tctgaggcca aggttacgct gtttggggcc atgccatggc 120
cgtttaatga tgggtgtgctc ttcttcaaca actcacgcga gaaggatccg ctctgctgg 180
actcaagctc acagagcacc agagagcttg ccctgggtcc agagcctgag gtttcaggga 240
atgatactga ggtgacatca aggctgagag atggttcaac ctctctaat ggtgtgaaag 300
gtgcacgcta tgggtgcaaaa ggccgtgcta atggtagaac tgctgctgta tctgaagatc 360
acatgctttc aaaccatgga actgatggtc ctgttggtat tcctgggtgt 409

<210> 5087

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C8

<400> 5087

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cgctccgcac ctgcctaaa acacccctcc gggcattgcc gcaccgagct ccccttcctc 120
aaattgcccc aagcccgac gcctcgacgc ccagctccgt gctcgagttg ctagcggcgt 180
cctccatcgc tccgcctccc tatgtcaccg ccgggccgct ggctcctccg ccgactcagg 240
ccggggccac ggcgcggtta tgatgcgtga ttctaggacg cgcgttgctg ctctgctgct 300
gggacgatct agccggagag agtgattatc tgtcacaatg gcctccacag atcacactg 359

<210> 5088

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-047-Q1-E1-C9

<400> 5088

gcgtccgaga ggacaagaac tacagctaca gcctcgaggt cggcgccaac gggaggaaga 60
tggtgtggga gggcacccca aggagcgtcc gcgacagcca ccgcaaggtg agggacagcc 120

acgacggcct catcatccag aggaacatgg cgctcttctt ctccggcggg gaccggaagg 180
agctcaagct caggatcacc ggacggatct ggaaagagca gcagacacca gacggcgcat 240
gtactccaaa tctgtgcagc taattaagca atcttcaaac acacaccttg cctgtccttc 300
tttctcttct taattaatcg tgggtggtgg gctcaaaggg attatttatt actaattatt 360
aggaggacgt angatgctcg tgtaaatgaa actgtgtata ttatatggat ggcatggcat 420
ccct 424

<210> 5089

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D1

<400> 5089

ccgggtcgac ccacgcgtcc acccacgcgt ccggcaagga catgctgac aaggacgtga 60
ccgtgacggc gcccggggac agccccaaca cggatggcat ccacatgggc gactcatccg 120
ggatcaccat caccaacacc gtcattggcg tcggcgacga ctgcatctcc atcggtccccg 180
ggacctccaa ggtgaacatc accggcgtga cctgcggccc tggccacggc atcagcatcg 240
gaagcctagg gcggtacaag gacgagaagg acgtcacgga catcaacgtc aaggattgca 300
ctcttaagaa gacgatgttc ggcgtccgca tcaaggcgta cgaggacgcc gcctccgtgc 360
tcaccgtctc caagatccac tacgagaata tcaagatgga ggactcagcc aacccaacct 420
tcatcgacat gaagtactgc c 441

<210> 5090

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D11

<400> 5090

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acggctccaa aaattccatc gtcaccggca aaaaaagctt cgccgacggg atcacaactt 120
tcaagacagc aaccttcact gcgcaaggcg acgggttcat ggcgatcggg atgggggttcc 180

agaacacggc cggcgcgag aagcaccagg cggttgcgct gctggtgcag tccgacaagt 240
ccatcttcct caactgcaag atggacgggt tccaggacac tctgtacgcg cactccaagg 300
cgcagttcta ccgcaactgc atcatctccg gcacggtgga cttcatcttc ggcgacgcgg 360
cggcggtgtt ccagaactgc atcctggtgc tgcggcggcc catggacaac cagcagaaca 420
t 421

<210> 5091
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D12

<400> 5091

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gccagccaaa gcttgccatg gcggccgtcc ggtccgacag ggtccaccac caccaccgcc 120
gctccgaggc gtcgtgtccg gcaacctccg cggccgtggc ggcggcgagg gccgatgacg 180
ccctgcgcca gcgcccgcgg gggctcgtgc aggtccggga gcgggaccag ggcccgtgt 240
cgacggggca ccagcacctg caccaccatc accaccagct gcggcggtcg gcggcggtcc 300
caccgcccg cccggggccg gggcgccgcc ctctcagcg ctgcgaaagc gacctcaaca 360
tcaggagca ccgtcctgc agcgaggtgg ccggcgccac cgcggccggc tgcgccgtg 420

<210> 5092
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D2

<400> 5092

gggtcgaccc acgcgtccaa atcattgcac cctccccctc cgtcacccca ccacatccgg 60
ccagcccaac gaaaatgtcg cgcgccacag ctgcggtcct cttctacatc ctgcgccgtc 120
ctgccctcag cgcggccgag gcaccggcag agtcaccgaa ggcaggcagt cctgccaaagg 180
caccggccga gtcaccgaag gcaggcagtc ctgcagctcc tgccaaggca cccgagtctg 240
ctgccacgag aactgcccc gctaaggcac ctcaagccgc ctccaccccc gccgttgccg 300

ctgccccatc gtcgtcgtcg tctaggaagt ctggtccagc tgccgcgccg accaccgccg 360
cctctacacc gtcttcttcc acggacg 387

<210> 5093
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D3

<400> 5093

cgggtcgacc cacgcgtccg cccacgcgtc cggaagaaga agaaaaagaa gggcgccagg 60
aagggcagga aacgcgcctc catcctgggc gacgccggca ctttcgaccc ggacttctcg 120
cggcgggtacc ggctcggcgc ggagctcggg cgcggcgagt tcggcgtcac gaggcggtgc 180
gaggacgccg ccacggggga ggccctggcg tgcaagacga tccggcgga gcggtgctc 240
ctgcgcctcg ccggggccga cgcgaccgac gtgcagcgcg aggtggagat cacgcggcgc 300
atgtcggagg tgagcggggg cagggtcgcg tgcttgcgcg aggcgtgcga ggacgacgac 360
ggtgtgcacc tcgtcatgga gctctg 386

<210> 5094
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D4

<400> 5094

gggtcgaccc acgcgtccag caagatctaa gcaaagactt gatttagtta tggacggatt 60
ggtaggcctc ttgaaagttc gcgtggtccg gggtatcaac cttgcctacc gcgacgcaag 120
aggcagcgat ccgtatgtcg tctacggct tggcaagaag aaactgaaga caagcgtgaa 180
gaagagatcc gtgaacccca tatggcaaga ggagctaact ctgaccgtca cagatcccag 240
ccaaccactg aagctggagg tgttcgacaa ggacaccttc agcagagacg accccatggg 300
agacgcggag gtggacgtgg cgccactgat ggaggcgggtg agcatgaacc cgcgggagga 360
gagtctgagg aacggcgcca tcac 385

<210> 5095
<211> 55
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D6

<400> 5095

ctatagtgag tcgtattatg agttctactc tgtctaggcg tcaatctatc tctca 55

<210> 5096
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D7

<400> 5096

ttcgcgggcc gacccacgcg tccaaaacaa tccttgacc cctccccctcc gtcaccccccac 60
cacatccggc cagcccaacg aaaatgtcgc gcgccacagc tgcgggtcctc ttctacatcc 120
tcgccgtcgc tgccctcagc gcggccgagg caccggcaga gtcaccgaag gcaggcagtc 180
ctgccaaggc accggccgag tcaccgaagg caggcagtcc tgcagctcct gccaaaggcac 240
ccgagtctgc tgccacgaga actgcccccg ctaaggcacc tcaagccgcc tccacccccg 300
ccgttgccgc tgccccatcg tcgtcgtcgt ctacgaagtc tgggtccagct gccgcgccga 360
ccatcgccgc ctctacaccg t 381

<210> 5097
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D8

<400> 5097

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gcatgtatag acaatgcaat gagagccttg ttccttctag cgctcttctg caccgtgcat 120
ggtgagaagg caaagtcaaa ggacaacgat tcaaaagcgt ccggggcccg tgggtccttc 180
gacatcacca agttgggcgc ctctggcaat ggcaagacgg atagcacgaa ggctgtgcaa 240
gaagcgtggg catccgcgtg cggcggcacc gggaagcaaa cgattctcat cccaaggggc 300

gaattcctcg tcggaccaat caacttcaa

329

<210> 5098

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D9

<400> 5098

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tcctcctggt cctcttctgc atcgtgcatg gtgagaagga agagtcaaag ggcacgatg 120

cgaaagcgtc cgggcctggt gggtccttcg acatcaccaa gttgggcgcc tccggcaatg 180

gcaagacaga cagcacgaag gctgtgcagg aggcattggc atcggcgtgc ggcggcactg 240

ggaagcagac aatcctcata cccaaggggtg acttccttgt cggacaactc aacttcacag 300

gcccttgcaa gggcgacgtg accatccagg tggatggcaa tctgctggcg accacggacc 360

taagccagta caaggaccat ggtaattgga tcgagattct acgtgtggat aacctggtca 420

tcaccggca 429

<210> 5099

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E10

<400> 5099

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acatgccata cagtggcctg tcatacgttcg gaacagcatt tttgtccaag ttcgaatgtt 180

ctcagatgcc acatccactg ttagagcacg tgaccttcgt ggacactcca ggagttttat 240

caggggagaa gcagcggacg cagcgcagct acgatttcac cggagtcacg tcgtgggttg 300

cggccaagtg cgacctcatc cttctcctgt ttgatccgca taagcttgac atcagcgtg 360

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acaacgccga acaagttgat 440

<210> 5100
 <211> 386
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E11

<400> 5100

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 atcagttcct gatgagggtca ttcgatgtaa tcatgtatgc acaatcgcg tccgagctga 120
 catgccagag agtggcctgt cagcggttcgg aacagcattt ttgtcgacgt tcaaagtgtc 180
 tcagatgcca catccactgt tagagcacgt gaccttcgtg gacactccag gagttttatc 240
 agggggagaag catcggactc agcgagccta cgatttcacc ggagtcacat cgtgggtttgc 300
 ggccaagtgc gagctcagcc ttctcctgtt tgatccgcat aagcttgaca tcagcgatga 360
 gttcaaactt gtgatcgggt ctctcc 386

<210> 5101
 <211> 386
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-047-Q1-E1-E2

<400> 5101

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 gccctggctg gggccggtag ccgcgaccag gcaaggggcy accgcgcctt cgccgggatc 120
 caggcgctcg ccatgcgccg tgggtccgca ccgccttga gagccgccac ggctccgtc 180
 gggccgccc cagtctgtc catccggcgc caggagcagc agcgcctgng cgtcctcgtc 240
 atgcgtgccg gtgtcagcca accccgcacc aggaggcggc cacgccgaac tccgcgagaa 300
 gccgaccgcy cccgacgttg ccgatccgc accggcggtc ggtgtggcag ggacgtgccg 360
 cttgcgcaga gatgcagagc acccgt 386

<210> 5102
 <211> 178
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E3

<400> 5102

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cgtttctgtg tatactgtgt aaaggctcta aaggaaagag aagatgcaca tattcaaagc 120
ctcgggaacta attgctctgt tgtccactat gttatccaag tatatatttg ttcttcaa 178

<210> 5103

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E6

<400> 5103

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cgaggcgggc aagacgtacc gcctccgctg gtgcaacacc gggatcaagg cgtcgctcaa 120
cttccgcata cagggccacg acatgaagct cgtggagctg gagggtcac ataccctgca 180
ggacgtgtac gactcgctgg acgtgcacgt cggccactgc ctctccgtgc tggtcgacgc 240
cgaccaggcg cccggcgact actacatggt ggcctccacg cggttcatcc acgacgcaa 300
gtccgcctcc gccgtcatcc gctacgccgg ctccagcggc gcccgcggcg cgccaacat 360
gaccgagcca ccggccggct gggcctggtc catcaaccag gccaggctcg tccgc 415

<210> 5104

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E7

<400> 5104

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gagagccttg ttctctctgg tcctcttctg catcgtgcat ggtgagaagg aagagtcaaa 120
gggcatcgat gcgaaagcgt ccgggcctgg tgggtccttc gacatcacca agttgggcgc 180
ctccggcaat ggcaagacag acagcacgaa ggctgtgcag gaggcacggg catcggcgtg 240

cggcggcact gggaagcaga caatcctcat acccaagggt gacttccttg tcggacaact 300
 caacttcaca ggcccttgca agggcgacgt gaccatccag gtggatggca atctgctggc 360
 gaccacggac ctaagccagt acaaggacca tggtaatgg atcgagattc tacg 414

<210> 5105
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-047-Q1-E1-F1
 <400> 5105

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 gacagcgaca agccgatcaa gggacccatc accgtccaac tcaccaccga gggaggcact 120
 aagaccgtct acgacgatgt catccccgcc ggctggaagc ccaacactgc ctacaccgcc 180
 aaataaacta accaaataat aataagtatc aaatggcaca cttgatagac ctttattttt 240
 tattttttat ttaataaaag gatataagga gtgtgacaaa caacaacacg aatattgtat 300
 tgtctatgta tctcctatat atgcaatccc aattttatca tggccacatt ttaaaatgga 360
 atatatgata tatatatgta catatggatt ctacatg 397

<210> 5106
 <211> 386
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-047-Q1-E1-F11
 <400> 5106

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 ggcccagggc atccacgagg agaggacaag cgcgcggcgc ggtcgagctg ttgaaacgcc 180
 ggccgaggtt gattttctcg tgcgatggac acgacacggt gttgacgacg acacggtggt 240
 gacgtggccg gcgccgttga cgcgttgca ttgcgcggag gaaagagatc gcgcgctagc 300
 tagctctgaa aagtcactag cgttcaggag taccaggcag gtcttggttct tttacacaca 360
 atccaacact ggattaacac ggtttg 386

<210> 5107
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-047-Q1-E1-F2

<400> 5107
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 ctctccacc ggctccagtt agctcaccac cgctcctgt gaaatactct tcaccaccta 120
 ctccagtcaa ctccaccgcca ccacctgtaa aattacctcc tccactagct ccaatggttt 180
 caccatcgtc tcccatgaaa tccccctccac caacggcacc cgtcagctcg ccgccaccgc 240
 ctgtaaaatc acctcctcca cgggctcctg tgatttcacc atcacctccg gtgaaaatcc 300
 tcccaccacc ggcaccagtt agctcacctc ccccgccaat tcgctgagc tcagcacccc 360
 catttgcaaa atccccaccg ccacagttca natcacctgc accaccaact 410

<210> 5108
 <211> 389
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-047-Q1-E1-F3

<400> 5108
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 cctcaccgc tcggagagtc ggagcccggc ggccggaggg cgacgtcgtc cctaataaat 120
 actaataatt tatcactata cataaccaat atataagcca tgggcaagcg cagcgtccct 180
 cgggtaccctg aggacgagga caaaggcggc tgctgcggct gcctgtgctg gtgctgctgc 240
 ttctgttgt tcatcgtggc ggcgctggcc ggcacggccg cctacttctt cttegtgtac 300
 aagcccaagg cgccgtccta ctccgtgagc aacatgtccg tctcgagtt cgacttcagc 360
 acctccgacc tgacgctgta cgtcaagct 389

<210> 5109
 <211> 385
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F4

<400> 5109

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atggcgagc gagcgggtggc cacgatgacg actaataagc cctcctcct cctcgccctg 120
gcgtccgcgc tccttggtgc ggcgcggcc gccgcgaacg cgcgcggcg ggcgttcagc 180
aactgggtgg cgatgaacca gcagagctac gcgctgtacg cgcagaagtc cgtcggggac 240
gggggcaagg agcccctgga caagaagctg tcggaggcgg agaagaagaa ggtcacgtac 300
gtggtggacc ccagcggcaa ggcgcactac accaacaatca ccgcggcgct ggaggatc 360
ccggtgagca acaccaagcg cgtga 385

<210> 5110

<211> 72

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F5

<400> 5110

caaaagggtc aaagcttagt tagccgtgca tgcaaatca tacccttct atagtgtccc 60
caaattccaa tt 72

<210> 5111

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F6

<400> 5111

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acgcacggtc cccgtcccaa tggcccagac tctgtccgc gcctcggagc tggccaccct 120
gaagcgcccg ttcggcaacg acgggttcgg cgatggcagc aacaacggca gcgcgaccgg 180
cgagaagccc aaggcgcggc ggcgggaggc ggaccggcg gcggcgatgg ccgcggcgcg 240
gcacgagttc ggcgagcacg ggcggcgtgaa catgtccatc gaggcgtcgg cgacgttcac 300
ggtgatggag ccggacacga tgcggcggct gttcgcgggc gagctgggccc ccgaccgcgg 360

cgacatgtac atctacagcc ggcacttcaa cccgacggtg ctggcgctgg gg 412

<210> 5112
<211> 202
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F7

<400> 5112

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acacaaaaaa aataaaaaaa aaaaaaaaat cagtcagaag aaaacaatac taaaaagggc 120
ggacgctctc atggatcaaa gcttacttcc gctataatac caattcatac accttcaata 180
gcgtcaccta cattgaatta ag 202

<210> 5113
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F9

<400> 5113

gggtcgaccc acgcgtccaa cggagtcgg cgtgcctagc tcgatcttga accatagcta 60
gccagcatgg cgcccagcag cagcatagca gtactgctgc tcctcgtcgt cgccgtcgtc 120
ctctccaacg tccccctctc gggcgccctg gcctcctcgt cgtcgtctct gctgcaccag 180
tcgtctccgt ctgagagtga gactgagacc gacagtagca gcggagaatc ttcttcgctg 240
tcgtcgtcgg aagaggccgg cgagaaggag aaggagaagg agcaggagat ggagaaggcg 300
gtcgcggcgg agaaggctgc ccagcaggag ctgctcaagt acgccaagga gaagggcatc 360
gtgtcaccga ccaacggcac ggggcggtac aagggcatcg cccgggagtt cgtggacgcc 420
cacaacgagc tccgcgcgcg cta 443

<210> 5114
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G1

<400> 5114

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acaagcacga gataccagcc accatgcgcc tgccctcct cctcgtcgtc gtggccgccc 120

tctcggcgcg caccgcggcg cagctgccgc tggcggcgcg cggcggcgcg gccctgaagc 180

cggacttcta tagccagtcg tgcccgcgcg cggagcggat cattgcggag gtgatgcaga 240

cgaagcagat gggaacccg acgacggccg cgggcctgct ccgcgtcttc ttccacgact 300

gcttcgtcag cgggtgcgac gcgtcgggtg tgatcgcgtc caccagttc cagaagtcgg 360

agcacgacgc ggagatcaac cactccctcc ccggggacgc ct 402

<210> 5115

<211> 347

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-047-Q1-E1-G10

<400> 5115

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gatacaatac atagaacgcg cgaatgccgc cacacaacga caatatgtca ctccaatatc 120

ncatcagctg cccacccgct tggttctcac aggactgact cggttacccc cttacaaaac 180

cttcaacaaa ttacaggac gggaacagcg caggtctctg gtagccagggt tcttacaagg 240

acaatgcaaa aataacacga ggccatcttt ttggtgatgt gaggtataaa ttaaaatgaa 300

aatggcatg ggagtgaatg cctcatgagt taggtttgta cagcgaa 347

<210> 5116

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G11

<400> 5116

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gccccacagg tagcggaggc aaagaagaag agagcggcgg agagcggcga agcggcggag 120

gcgaagaaga tccaggacga cttctgctcg acgctgtgcg agggcaagaa ggggacggac 180
 ctggctcgtgt gcaaggagtc ctgcgcgctc tcccagcagt ccaacctggt gctgtacggc 240
 aggatccagt gcaagggcaa gtgcaccgag cagaagggca tcacggcgcc ggccatgaac 300
 gtctgccaag aggagtgcga caacgcgtac gtgggtgaagg cggccgaggt caccaatgcc 360
 tgcagcgtca cctgcgcaa tgagaagaac ccgcgcctca gcgagaactg caagagggtcc 420
 tgcacccctc ctc 433

<210> 5117
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G2

<400> 5117

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 cgcgctgcac cgccgcaagg cgggtgcaggc cagcctctcc gcgctcaaga gcgcgggcggt 120
 cgagggcgtc atgggtggacg tgtgggtgggg catcgccgag cgcgacggcc cgggcccggta 180
 caacttcgcg ggctacgcgg agctcatgga gatggcgcgc aaggccgggc tcaagggtcca 240
 ggccgtcatg tccttccacc agtgcgggcg caacgtcggc gactccgtca gcatcccgct 300
 gccgcggtgg gccgcggagg agatggagag ggaccaggac ctctgctaca ccgaccagtg 360
 gggccgcccgc aactacgagt acgtctcgct cggctgcgac gccatgcccc 410

<210> 5118
 <211> 348
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G3

<400> 5118

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 catcaaggag gtgcaggcca gattctctgc gcgtaatagc gcgggcgta aaggcgatcat 120
 ggtggacatc tagttgtgca tcgtcgaacg cgacggggcca tgccgggtgga gcttcgctgc 180
 ctgcgctgat ctcatggaga tgggtgtgcat ggccgggctc aacgtccagg ccgtcatgtc 240

cttccaccag tgcggcggca acgtctgcga ctccgtcagc atcacgctgc cgcggtgggc 300
 tgcgacggat atggacaggg accatgacct ctgctacacc gatcagtg 348

<210> 5119
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G5

<400> 5119

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 ggccgcgctc ggcgctgggg tgcgcgccgc cttcgccgct gggctcgtcg gggtttacct 120
 ttccatgccg gactccgact acagcttcct caagctgcc aagtaatctcc aggaactcca 180
 aatcctcact ggccatcttg agaactatac tagcgactac accctacagg tgttggtagg 240
 ctactgcgcc gtgtacatct tcatgcagac ctcatgatc ccaggaacga tattcatgtc 300
 actgcttgct ggtgctctgt ttgggcagct ccggggcgctg gccctggtag tcttcgccgc 360
 cactgctggc gcttcttcgt gctatttcct gtcgaagatg attgggaagc cactggtggt 420
 cacgctg 427

<210> 5120
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G6

<400> 5120

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 agtcgccgtc gatgaagtcg gtggagaaga cctggagctt gtcgccgagg cccttggcga 120
 agacctcggc gatgaacatc cgcgcgtagc cgtggatccg cctcgtcacg ggccacacgc 180
 acaccaccgg gttgtcgggc ctgggcgtca ccgtgttctc caccgggtac aagaaccgcg 240
 ggcccgccac cggcggctgc tgccccagga acttgagggt gctctcgaac ttggtctccg 300
 gcaggctcgt gtcgatccag ttgtccctga ggtaccggc gctccacagg ggctccccgg 360
 gcccgggcgc cggcgacctg cgcggcttcc acacgcagat ga 402

<210> 5121
 <211> 206
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-G7

 <400> 5121

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 tggcggggtg gtggtgtgtt gtaatttgta aagagatcga ttaggggtga tgcggtggag 120
 gggatactac acactaacia aaccgagttg tatactgtac tactaaacta gagatggtaa 180
 tggtgacgtg attccccgatt tctctgg 206

<210> 5122
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-G9

 <400> 5122

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 agttcctcga gctcaagtcg tggtctctct ccacgctcgg cggcacctcc acctgcgagg 120
 acgcctgcaa ggacctgccc aagaccagcg acaaggacga cgtcgtcaac ttcagcctcg 180
 acttcgagaa gctgcagcgc gtcacgctcg acctcatcac cgaggcgtcc ggcaccatgt 240
 ccgcaggcat cgccctgcca cctccaacg ccggagcgcc ctctacggc gcggcggcgc 300
 cttccggggg ctccgcccgat gccccgcgcg gcgcctccga gggccctgcg agcgccagcg 360
 gcccgctctgg tgacgacgcg ccggcgctccg gtgctggtgc cagcgcgctcg gctgc 415

<210> 5123
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-047-Q1-E1-H11

 <400> 5123

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cgttcacgct cgagaagccc atggacctga agaagggcgt gaaccacgtc gccgtcttgg 120
 catcgctgat gggaatgacg gacagtggcg cttacatgga gcaccgtctg gccggcgtgg 180
 acaggggtgca gatcacgggc ctgaacgcgg gcacgctgga cctgacgaat aacggctggg 240
 gccacatcgt cggcctcgtc ggcgagaaga agcagatcta caccgacaag ggcatgggca 300
 gcgtcacctg gaagccggcc gtgaacgaca ggccgctcac ctggtacaag aggcaattcg 360
 acatgccgtc gggagagnga ccggtcgtgc tggacatgag cacgatgggc aagggcata 420
 tgttcgtca 429

<210> 5124
 <211> 401
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-047-Q1-E1-H3

<400> 5124

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 cacgacgtga tcatgctgac gcggacgagg accgggcggg cgttcccgcc gccgatctcc 120
 gtgatcggca agggcgggcg gccgtggctc tgctgcggg cgacccgca cggtggacgc 180
 ctctgtctgc ggcagatgcg cctgccgtcg cangagctgc tgcagccctg caaggatgac 240
 ggcaggttca agctcctcat gcacccggag gcccgcgcg gcccggtgcgg gggcggcaca 300
 ctgcaagaac ggcaaggga tgatagctag cgctcttaat tgatcagctg atcagatgat 360
 ctgccgccac gcacacgtcg tcttgatgg gctggctgct a 401

<210> 5125
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-H5

<400> 5125

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 ttggatcgaa ttagacgact tcttcgtcac tctcttcatt accacgctaa cttgtaattc 120

gcaggatcta agcagagact tgatttagtt atggacggat tggtaggcct cttgaaagtt 180
 cgcggtgggcc ggggtatcaa ccttgccctac cgcgacgcaa gaggcagcga tccgtatgtc 240
 gtcctacggc ttggcaagaa gaaactgaag acaagcgtga agaagagatc cgtgaagccc 300
 atatggcaag aggagctaac tctgaccgtc acagattcca gccatccact gatgctggat 360
 gtgttcgaca aggacacctt caccagagac gacgccatgg gag 403

<210> 5126
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-H7

<400> 5126

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 gagcctgggc aggacgacac gttgctctcg gaagcgatca ctgacgccgt cctcgacctg 120
 ttcgacgcgt ggagcgagag cgtcgagagg cctttggtgc gacgggcgaa ggagatctct 180
 tcttggttcc tgcaggaagg aagagaagac acacctctc ctgttccgcc gtctacgcgt 240
 ccttggtcgg ccgaagatgc agatgtgttt tattccttag agaattgaca gagcagcttg 300
 aagcaagaga tcgagacatt atgaaactac gtcggtagag ttcatttacc taacgatgtc 360
 aggaagctga aggcaaaggt ctccacggct ttgtacctga gatttgagtg agag 414

<210> 5127
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-H9

<400> 5127

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 gcaagactat caccctcgag gtggagtcgt ctgacaccat tgacaacgtt aaggccaaga 120
 tccaggacaa ggagggcatc cccccagacc agcagcggct catcttcgct ggcaaacagc 180
 ttgaggacgg gcgcacgctt gctgactaca acatccagaa ggagagcacc ctccaccttg 240
 tgctccgcct caggggaggc atgcagatct tcgtgaagac cctgaccggc aagactatca 300

ccctcgaggt ggagtcctcc gacaccattg acaacgtcaa ggccaagatc caggacaagg 360
 agggcatccc tccagaccag cagcggctca tctttgctgg gaagcagctt gaggacgggc 420
 gcacgcttgc cgact 435

<210> 5128
 <211> 179
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A1

<400> 5128

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 ggccggttcc cagcccacaa ccctgtcatc tccactggca gagtcaccc aattgcagta 120
 acgggcattc atctggaaga gctgaaagaa attacaagag acttcaacag tgatgcct 179

<210> 5129
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A10

<400> 5129

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 ggccgtactc tgtgtccatc atggagatca gcgagcccat tttgccggcc gcgttgccct 180
 cccccgtcgc ggcccccggc cgccgcggca agggtggtaa gcgcaagatc aagccatcag 240
 cggcaaccca tgaggattcc aacatgatcc cgcgcaagcc cgtcgaagca gtgggtggtgg 300
 gtaagggtaa ggtggccaag gataccgtgt ccgagtcacc tgctccaagc cccgcccccg 360
 tctccgcccc ttagttgcgt gttgggcgcc gctgcccgcc ggcccccgcc caccatgcgt 420
 cgtgtctgcg cgcgcacgca cgca 444

<210> 5130
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A2

<400> 5130

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aaggaaatta caggcgaact tcagcagtga tgccctcatt ggcgatggct cgtatgccag 180
agtctatttt ggtgtgctga aagatgggac gaaatctgca gtgaagaagc ttgactccag 240
caaacagcct gatcaagaat tccttgtgca tgtttcagct gtctcaagat tgaagcatga 300
gaatgttgtc caactcgtcg gatactgcgc cgaaaggagc acccgcgctc ttgcttatga 360
gtatgcagct aggggatcat tgcattgat cctccatgg aaagacgggtg tc 412

<210> 5131

<211> 108

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-048-Q1-E1-A3

<400> 5131

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gcaagcttct cgagggtgatt gaagccagtg agttgccaga aaattttg 108

<210> 5132

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A6

<400> 5132

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tcagcttcgg agcagaggac cgcgccgaga acatccgcag agtaggggaa gtagcgaagc 120
tgttcgccga cgctggcctc gtctgcatcg ccagcctcat atcgccctac agaagcgacc 180
gaagcgcgtg tcgcgatctg ctgcccaagc actcgtttat cgagggtgtc ctggacgtgc 240
cgcttcaagt gtgcgaagcc agggaccca aaggcctcta caagctcgca cgcgccggca 300
aatcaaagg gttcaccggc atcgacgatc cttacgaacc gccgtcggac tgtgagatag 360

tgatccagtg taaagtcggc gactgccctt cgcctgaatc gatggctggt cacgttgtgt 420

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<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-B1

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agcaggaggg ctcttcggaa taagaatgga tgtggctgta actctgcttc tagaccggtg 120

atggttcagc ttagaagcag gggatcttca tcatcagaat aaaaacgtgt gctgttgtgt 180

tgctgtgtct acgccactag tatttctgtt gttaacttat gttctagctt tgtttaggt 240

aaactgcgaa ccagaggttg cagaaccgt actgctcgtt taagctcatg gtgaactacg 300

agctaaaagg ctgttgccag agtcgatgtc agtatgtcac ttgtcactgg aggtccccgg 360

ttcagttcag atgttgcttt ggcacgtgct attcttttgg a 401

<210> 5134

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B4

<400> 5134

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gatgggaagg acgagagggt cccgggtgtg gaggccgcgc tcggcgccgg agtcgccgcc 180

gccttcgccg ctggactcgt cgggtgtctac ctttccatgc cggactccga ctacagcttc 240

ctcaagttgc cacgtaatct cgaggaactc caaatcctca ctggccacct tgagaactat 300

actagtgact acaccctaca ggtgttggtg ggttattgcy ctgtgtacat cttcatgcag 360

accttcatga tcccaggac aatattcatg tcaactgctt ctggtgctc 409

<210> 5135

<211> 381

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-053-Q1-E1-B5
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 gacgatggcg ccgcgccagc cgctgctccc cagtttcctc tacgcggcgt cgtccggcgt 120
 caacggcagc agggaggcgc ctccggtggt ggcgggcgcc ccgagcgagc cgctcggcaa 180
 gatcgagatg ttctcggccg catactacgc agcgggcgcc ttgggaggcg ccgcgggctg 240
 cgggttcacg ccagccgccg tcaagccgct cgacgtcatc aagtgaata gccagatcga 300
 cgccgccaag tacaaggaga cctcgtcggc gttcaacgtg gtgattacgg agcacgggct 360
 ccggggcctc tacagggggt g 381

<210> 5136
 <211> 363
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-053-Q1-E1-B6
 <400> 5136
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 cccatattgg aataggacaa aaggagctga tcatttcttt gttgcttgcc atgactgggg 180
 gccttacaca acaaaattgc atgatgaatt gcggaagaac actattaaag ctctctgcaa 240
 tgcagatctc tctgaaggat tttttatccg tggaaaagat gtttcccttc cagaaacatt 300
 ccttaggtca ccaagaagac ctctaagaga tattggagga agaccagctg cgcagaggac 360
 tat 363

<210> 5137
 <211> 378
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-053-Q1-E1-B8
 <400> 5137

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ctcgcgaaaa taatgaagag ccgcagcatg gcatcatcgg ccgcgctctt ggtgctagcc 120
ctcgcgctag tggcggccac cgccccacag gtagcggagg caaagaagaa gagagcggcg 180
gagagcggcg aggcggcgga ggcgaagaag atccaggacg acttctgctc gacgctgtgc 240
gagggcaaga aggggacgga cctggctgtg tgcaaggagt cctgcgcgct ctcccagcag 300
tccaacctgg tgctgtacgg caggatccag tgcaaggga agtgcaccga gcagaagggc 360
atcacggcgc cggccatg 378

<210> 5138

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B9

<400> 5138

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accagcaata ctggcgcgat ggcacacaac atatgggatt tcttcatgtt cagcccaaag 120
aacagcattt ctgaaacaat tataagctgc acgtgatgtt tagacgcgac cttcttttcc 180
gtatgtacaa gcaagtatcc cgtatcctcc tagacacagt acaaaaccat ttaaaacttg 240
gcaacttgct gcggtgtcac atgtaaaaga agggttgtcc aggaaggaaa atataggttg 300
gcaatggcaa gagtctgctg gtccaacaac tccctgcttc tatggacctc cgtgggagcc 360
ttactttgta c 371

<210> 5139

<211> 377

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-C1

<400> 5139

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cgccatcgag caattataat ctacagaat aataaacatc atggggcaag cctcacggct 120

cgctcctcctc gccgtcgtgg cgctgctgtc cgccggcctc ctcccgcagg cgctgggtaa 180
 gggtangggg ggcangggac acggtggcgc cgtcaaccgc caggtcgccg gcatctgctc 240
 tcgcaccccg ttcccggagg tgtgcacgtc caccgccggg cggcacgcgt ccaagtaccc 300
 ggtcatcgac aacctggccg tgctgaacat gcaggcggac gcgttcgcca agcgcaccgc 360
 gcaggcgcgc aagcacg 377

<210> 5140
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C10

<400> 5140

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 ggcaagcagt tcgaggcgag ggtgttcgag atcccggagc agaagggtgtg cgtggcgttc 180
 ctctccaacc acaacaccaa ggacgacgtg acgtgacgt tccggggcca gtctacttc 240
 gtgccgcgcc actccatcag catcctcgcc gactgcaaga ccgtcgtctt cggcaccag 300
 cacgtgaacg cgcagcacia ccagaggacg ttccacttcg cggaccagac gacgcagaac 360
 aacgtgtggc agatgttcga cgaggagaaa gtgcccaagt acaagcagtc caagatcagg 420
 ctgcgcaagg c 431

<210> 5141
 <211> 144
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C11

<400> 5141

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 ctgacgctga acctttacaa gcaaggcctg ctctggggga agatatcgac cgccaagggg 120
 ggcaatcagt tcaaggcaag ggtg 144

<210> 5142

<211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C12

<400> 5142

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 agactggctc gcgctgctcg tcatcaagtc cggctagctc ctggtgcacc tctgtctcac 180
 gatcctctac gtcgtcgtct ccgtgttctc agtagcctca gtctactctg ctaagcgcaa 240
 ctcgctgacc ttcacgcgcg tggctctcgt agtacctcgc gtctggcgga cgctcgccgc 300
 gacgttcacg gcggcggttca cgatcttctt cacctagcag gctgtcgccg tgctcgtctt 360
 catcggcctc actttttcag cagacaactg ttctgggtcg cgtacctgct cgccttcctc 420
 gtcgacgttg cgtatcagct cgga 444

<210> 5143
 <211> 463
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C2

<400> 5143

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 cgcccttcgt tcacctctcc ttcctctcgt cctgcctgc cagggagagg ggaagtcaga 120
 ggcacggagt ggcgcagagc agacgcccg gaaccattgt agctgtccct gtcgtcgtcg 180
 tcgtcaacga acccacacaa ggaaaggatg gagaagaagc cgaccatcct catgaacagg 240
 tacgagctcg ggcgcacgct cgggcagggc accttcgca aggtgtacca cgggcggaac 300
 ctcgctccg gcgagagcgt ggccatcaag gtcacgaca aggagaagg gatgcgcgtc 360
 ggcagatcg accagatcaa gcgcgagatc tccgtcatgc gcctcgtccg ccaacccaac 420
 gtcgtgcagc tgcacgaggt gatggcaaca agagcaggat ata 463

<210> 5144
 <211> 382
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C3

<400> 5144

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ccaacaaaaa tgtcgcgcgt cacagctgcg gtgctcttct acatcctcgc cgttgctgcc 120

ctcagcgcg ggcagagtcg ccgaatgaag gcagtgtgc caaggcacct 180

gagtctgcca agagaactgc tgccccgct gaagcaccgc aagccgcac ccccccgctc 240

gccgccgtg ccccatcgcc gtcgtctagg aagtctggc cagctaccgc gccagccacc 300

gcctctacag ccccttcttc cacggacgag gaggtagcc ctcgccgcc agcatccacc 360

gccgcgcggt cccctgcggc tg 382

<210> 5145

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C5

<400> 5145

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tttcgcctat gatcggtgcc gccgtagtgc tggacaacaa tggcgccgac gcggtctcct 120

gcactgccat ccctagcgta acaataagcc tagaggagaa agaaaatc aatgggggatg 180

ttcccacgat cacctcggcc gcaagcaacg aggaggaggc gttgttcagt gtcggagaat 240

ccaccaagga cgatggccat cgcttgacga tggaatgcac cactcccgtc tcctccagta 300

gcccttccac tcgcaagaag cgcggggcgt tcagcctctt cagggcgatg ttctgtcct 360

tcggccggag cgacgacagc atgaagaaga cagacgacga caccacgagc cccaaggaga 420

gag 423

<210> 5146

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C6

<400> 5146

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agaagtacaa ggccacgatg gacgccaaaga cgcggcaggc ttctgcaggc gtggtggccg 120
ccgctacggc agagaagcgg tcccaggcgg tggaggccgt gctgcagcag cagctgaaca 180
tggacgtgtc cctgtccaag gcgacgtctt ccggggacga gaacaactac gtgagcgtgg 240
ccgccgccta cgagaaggcc gcgggcgccg tcatcgcggc gacgccggac aacaagctcc 300
gcgctatggc gtctcggttc gacggcgcgg tggcgccgga cccggggccg tgccccgccg 360
tcgacaagcc cttc 374

<210> 5147

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C8

<400> 5147

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gtcgcgcgcy cccgtccttc ttctcgcct ccgttcatt ccgtcccgcc ctccaccgcc 120
gccgccgcat tcagggatgg agatgaagaa gatcgctgc gccgtcctcg tcgccgcctc 180
ggcgccacc gtggcgctcg ccgcggaggc tccggctccg gccccacca gcggctcctc 240
cgccgtcgcy cccggcgctg gcgccgcct cggggccgcy gtcgcctcct tcttcggcta 300
ctacattcag tgagccggcc ggggctcccg gaggccgagg aggagacgaa ggcgagagag 360
agtgacatg 369

<210> 5148

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D10

<400> 5148

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ccctcgtaa taacatcatg gtcgtgggcy ccgtccttgc ggcgctcgtc gccggcgggc 120

cgtgcggggcc cccgaagggtg ccacccgggcc ccaacatcac caccaactac aacggcaagt 180
 ggctcaccgc tagggccacc tggtagcggtc agcccaacgg tgccggcgct cctgacaacg 240
 gcggtgcgtg cgggatcaag aacgtgaacc tgccacccta cagcggcatg acggcgtgcg 300
 gcaacgtccc catcttcaag gacggcaagg gctgcgggtc atgctacgaa gtgagatgca 360
 aggaaaaacc tgagtgtcgc ggcaatccag tcacggtgta catcactgac atgaactacg 420
 agcctatcgc tcctt 435

<210> 5149
 <211> 431
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-D11

<400> 5149
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 cacatcagcc atgggcgctt ggcgaaccaa gcccaagacg cttgaggggc aggccccagc 120
 tgaggccgcc gtctccacac ccaagggttg gcccgaggcc actccaatct ccgttgaggt 180
 tgcggtgat gaacaggtag ctgagaagg ggtggtggag gagccggctg cggcggccga 240
 cgttgagcat cagaaggcta atgaggtgct cgctccagag gcggccgtcg ccgagccccga 300
 ccacaaggan gaggaagccg tggagaagac cgtcgtcgan gaggagaagc cagcggcagc 360
 agcccatgca gaggaaaagg tcgccaccgc cgccgagaac acgacgacgg tggaggcgaa 420
 gaagaacgcc g 431

<210> 5150
 <211> 432
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D12

<400> 5150
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 ggtggtcgtc ggtgtggtcg ccaccgtcac ccgctccggc aagaaggccg gcgacaactt 120
 cacgggtccc ggggaggctt cccttgccac gtccggcaag tcggtcaagt ccctgtgcgc 180

gccacccta tacaaggagt cgtgcgagaa gacactgtcc caggccacca atggcaccga 240
 gaacccaag gaggtgttcc acagcgtggc caaggtggcg ctggagtcgg tccagacggc 300
 ggtcgagcag tccaagtcga tcggcgaggc caaggccagc gactccatga ccgagagcgc 360
 gcgcgaggac tgcaagaagc tcctggagga cgccgccgac gacctgaggg gcatgctcga 420
 gatggccggc gg 432

<210> 5151
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D3

<400> 5151

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 tggcgacgag gcggcaggtg tacgcggact tcatcgccca cgaggccatc tcgtcgagcg 120
 tggccgagtt cagctgggac ctcaagttcc cgggcgcgca ggtgctgctg gccgagttca 180
 acatgacctc ggcgggcggc gcgcagaact tcaagtcgca ggccgacaac tttcgtgtgc 240
 gcggtgctgc cggacacggc gttccaccag gtgttcatca ccccgggcgg cgtgatccac 300
 ctccgcgacg gcgccaaact gcagtagctg accagcacgg cgttcctgct ggtgggtgtac 360
 gcggacctgc tgctgcggac ggggcagacg gtgctg 396

<210> 5152
 <211> 385
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D5

<400> 5152

ccacgcgtcc ggtcgccgcc gcagctgacc acaacatcat cgaactgaca gggacagaca 60
 ggccaggact gctctctgag gtcagcgtg tgctcatcag cctcaagtgc aacgtgggtca 120
 gcgccgagat ctggaccac agcactcgag ccgcggccgt gatgcgggtc actgacgagg 180
 aactgggct ggcggtcaca gacgtgaga ggctcgagat gatcagggat atgctgtcat 240
 acctgtaccg tggacgcaat ctctcacgag gtggcagaca gtcctcgacg actgccagaa 300

ctcatagtgt gagtatgctg caacgtagga atcactatga ccgcgttcac gcaccactat 360
ctcagctcca tccacgacga tctca 385

<210> 5153
<211> 407
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-D6

<400> 5153

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actccgggag caaggcgctg cagttcctgg ggctccatga ccaggacagc acgggttcctc 120
ctgtccacac gcaccagctg gatgtggctg ccaatcaaga tgtggctgtg aacctgatca 180
tcacagacta ctgcatgcct ggcatgacag gatatgacct gctcaagaag atcaaggagt 240
cgtcgtctct cagagatatc ccggtggtga tcatgtcctc tgagaacatt cttcaagga 300
tcaatangtg cctggaggaa ggagctgacg agttcttctc aaaacctgtg cggctatcag 360
acatgaacaa gctcaagccc acatactgaa aagcagatgc aacagga 407

<210> 5154
<211> 406
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-D7

<400> 5154

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agcaaagaag agtacgggag ccgagaacta tgtcccatc cagaggacga cgagcgtgcc 120
ggcggcgaga ccaacagaga cgctcaagaa cgaggaacag gaggtcgacg agctgctgat 180
gcagttcgac gagaaggaga gcataagcac ctctccatt gaggagcacc tgcaagaacg 240
gctccctgac cctgtcgatc tgaaatccgt ggatctcgac agcagcaaga cgacgtcctc 300
ctcctccagt caggaggagt gcaaggatca agaagagaac acgggggaca ttctggagga 360
gaagcgtgac gggaaagaca gcgangacct gagcagcaaa ggcgac 406

<210> 5155
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D8

<400> 5155

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ccacgcgtcc gaccaacgtg tggctggacc acctctccct ctccaactgc caggacggcc 60
tcacgcacgt catcgccaag tccactggcg tcaccatctc caactgccac ctcaccaacc 120
acaacgacgt catgctcttc agtccagcg acaagcatcc cgaggaccag atcatgcaga 180
tcaccgtcgc cttcaaccac ttcggcagag gcctcgtgca gaggatgcca aggtgccgct 240
ggggcttctt ccacgtggtc aacaacgact acacgcactg gctcatgtac gccatcggcg 300
gcagcaaggc cccaccatc atcagccagg gcaaccgcta catcgcgccg cccaacctg 360
ccgcgaagca ggtcaccaag cagcatgaca cg 392
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<210> 5156
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D9

<400> 5156

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ccaagcgct catgcagcgc gctgcccgcg ctttccgcg cagcaggtcg cgcgcccgcg 120
tcaggacggt caaggacctc gccgaggaac gggcctcagt gtcgcccgc agcaacaagg 180
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ccagcagcaa cgatgcccgc gacggcgcca tgggcagcgt gcaggacgag ccgcggcagc 300
agcgccacga tgactatcac cccgagatcg tccccgagaa gatcatacac gaggacgcgt 360
tgccggtcgt tgctgcagag aaggagaccg ccgcgcgcgc cgccgtct 408
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<210> 5157
 <211> 423
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-E1

<400> 5157

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gtgacattgt atggtcgtgg cagggcagtg attcgcttcc tactcccttg ctgccgccgg 180
cgctgaggca ggcaaccaac caacgtccat gatttctctt gcataaaaaa atttgcaagt 240
gaattttggc acttatggtt cactaaaaac atgatgttaa acatattgtt actattaagg 300
gtggctggca aatgatttgt cactgtcata nggacgctgt actagtagca taacatttgt 360
gataatatat catcacgggc tcataataga tatgacaatg aaaatgattt ttattganaa 420
aaa 423

<210> 5158
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E10

<400> 5158

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atgaggatca cttggcttta atgatggaac tacttggcaa gatgccgaag aagattgcaa 120
ccatgggaac acgatcaaag gaatattttg accgccatgg agatctgaag cggatacgaa 180
ggctgaaatt gtcatccatt gaacgtgttc tcgttgacaa atacaaaatt tctgaatctg 240
atgcccggga attcgccaat tttctttgcc ctttactcga ctttgacca gagaagaggc 300
caacagcttt agattgccta aagcatccat ggcttaaaca tgacgaggat aaaacatgtg 360
ggtctcttaa caataatgat gccaaagag 388

<210> 5159
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E11

<400> 5159

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ttgagaagga atgcctcgac aagccatcct gcatgctgcc ggtggatcac acggtgtacg 120
gcgcggacat caactgcca tcaacgactg ctacactggg ggtgcaggtg agatgcggag 180
ggggcaagaa gggcgcctga gaataacaag atggatgctg ctaattaatg gacgtttcag 240
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attgaaatgt gattggaaca ttcttgatcg ggaactaaca tgaaatgagt ggagggtaga 360
tgctgatcag accaaagatg tgtatttccc cctctttcc ttctgtctcg tgttgtttca 420
tgtaaccatc ac 432

<210> 5160

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E12

<400> 5160

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attgttgagc ttgacagctt gaaggtttcc ggtgatgttt ggttcggttc tggaattgta 120
ctgaagggga aagtgaccat cactgcaaaa cctggcgctca agctagaaat cccagacgga 180
gcagtgattg ggaataagga tatcagtggc cctgaggacc tttagataag aatcagcgaa 240
tcagcaagga ggctcacttc gccaaagtggc ggatcatttt tcgtgttttt tttcctgtat 300
attcaaacag gttccatgat attatggaga atattaattg ccagtataat ccag 354

<210> 5161

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E2

<400> 5161

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gggaagcaag aggctgctag agatcgagct catcaaccaa ccaagtcgta cgtcgtcagc 180
atcacgaccg gatggcgcgt gccgcgtcca gctatgtatc caggaggggg ctctccgcag 240
cgatgacggt ggcggaggag tccgtgaaga aggtggagga caaggcgggtg aagctgggaa 300
ctgtggccaa ggacatcgcc agcgccatgg ccaccacgac ggacgagaag acggcgttct 360
gggaacctga ccccgagacc ggatactacc gtcgggtcac cggcacg 407

<210> 5162

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E4

<400> 5162

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caggagagg ggaagtcaga ggcacggagt ggcgcagagc agacgcccgt gaaccattgt 180
agctgtccct gtcgtcgtcg tcgtcaacga acccacaaa ggaaaggatg gagaagaagc 240
cgaccatcct catgaacagg tacgagctcg ggcgcacgct cgggcagggc atcttcgcca 300
aggtgtacca cgggccggaa cctcgcgtcc ggcgagagcc tggccatcaa ggtcatcgac 360

<210> 5163

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E5

<400> 5163

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ccaccatggc gcagcgagcg gtggccacga tgacgactaa taagcccctc ctctcctcg 120
ccctggcgtc cgcgtcctt ggtgcggcgc cggccgccgc gaacgcgccc ggcggggcgt 180
tcagcaactg ggtggcgatg aaccagcaga gctacgcgct gtacgcgcag aagtccgtcg 240
gggacggggg caaggagccc ctggacaaga agctgtcgga ggcggagaag aagaagggtca 300
cgtacgtggt ggaccccagc ggcaaggcg actacaccaa catcaccgcg gcgctggagg 360

atatcccgtt gagcaaacac a

381

<210> 5164

<211> 386

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-E6

<400> 5164

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ataatcaata caatgtggaa ttcattgaaa ggacggccag ttctgggccg tatataccaa 180
gggaaggagc caccacaatt tgttgctctt ttccagccca tggttatctt gaaggggtgga 240
atcggatctg gatacaagaa gctcatagaa gaaaaagggtg ctatgggtga gacttatact 300
actgaaggca tagctctaata tgcagtatct gagacatcta tctacaacaa caagactctt 360
caagtagatg cngtagcacc gtcttt 386

<210> 5165

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E9

<400> 5165

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cctcctcctc ctgcacctgg cgctccgcgt ccttgggtgcg gcgccggccg ccgcgaacgc 120
gcccggcggg gcgttcagca actgggtggc gatgaaccag cagagctacg cgctgtacgc 180
gcagaagtcc gtcggggacg ggggcaagga gccctggac aagaagctgt cggaggcgga 240
gaagaagaag gtcacgtacg tgggtgaccc cagcggcaaa gggcgactac accaacatca 300
ccgcggcgct ggaggatata ccggtgagca acaccaagcg cgtgatcctg gatctcaagc 360
ccggcgctca gttccgcgag aagctgttcc tgaacatcag caagccgttc atcacgttcc 420
ggtcggaccc caagaa 436

<210> 5166
<211> 432
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-F10

<400> 5166

ccgggtcgac ccacgcgtcc ggcgccctagg ggcggaaggc cgccgtgccc gttcttccca 60
gctgcagcaa ccggccagtgc cgcgcggttg cgttgcattt gcatggctgc gcgctgcgct 120
ctgggagctt gactagcgg gtcggcgcc taggcgcggg gcatctttcg agtgcgtgcg 180
tgtctgttca agctctgatc gtctctccgg ccattcgcg ggaggaaact gaccgccgccc 240
ttctcgctct cgctctctac cctattcccg gggctgagag gggaggagag aaggccacgt 300
ccacaccata aagcaggacg tacagacacg tgtacgangg ggatcacggt cgggtgaggt 360
gactaagctg gcggacggaa cgccgctcct ctacgacgtc ggaaaccggt tcgcgttgct 420
ctccagcata cc 432

<210> 5167
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F11

<400> 5167

ccacgcgtcc gcggacgcgt gggcggcggg aggcagggga cgcacgggca ggcagccatg 60
aacggcatca accccaacgg cgggttcctg tcgtacggga acatggagag ctatgcgatg 120
tgggtggcga ccggcgtggc gtcggccttc ttcgcgtccc tcgagcgctg ctctgcac 180
cacctccaca ccgcggagga cgacggcgac gaggaggagg aggacctga ggaggcccg 240
cgctccttct cccgcccgat ccctgagtac tactacgacc ggtccggctc ctccgcctcc 300
gtcgccaaga tgtgacctga ccgaaccgcg cctccctccg cccaagaaat gcgtggtgat 360
acgatccgtt tcttgatcta ttatgtgctc ttgcttgatt cgttgagtct ctagccaaga 420
agatgaacaa caac 434

<210> 5168

<211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-053-Q1-E1-F12

 <400> 5168

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 gcccggtgcat gcgtgttccct cgtcgtgctc ctctggccg ccatcgcggt ggcaccgttc 120
 gcggggcgccg cacgcgtgga cgttgtggag ggtaggtcca tggcatccgc cgatgcaccg 180
 gaggcggcgg ccgatgctcc cgctcctagc cccgactccg cctcatcccc agactcgtca 240
 tcggaggcgc cctctagcag cagttcctcc gactagacgc aaaaacctct tcattctctg 300
 gaaataacta acagtatata cgttgcaccc tgatgatata gaaacatgta cgtgcatcag 360
 tgtatggaat gcgagtggca aacacatgga atgtgcttgc ctaattattg t. 411

<210> 5169
 <211> 432
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-053-Q1-E1-F2

 <400> 5169

 tccagaattc tagggtcgac cgacgcgtcc ggctcccctg ccgccctgcg catgcacgcg 60
 cgatgcgggc cggctgctcc ggcagtcggg ccccttcctt tcccttcctt gcccggtgcct 120
 ggcccttgag cccctgacgc gcgcgcatgc atgtggcgta cccgcccggc ggtggccgtg 180
 cgtgccctca tgcattgtgc cgctgccgc gcgcggagcc ccgcgcgagc cgccacagg 240
 ccacagccga gcgagggagg caggcagagc agcggccagc gctgaagccc acggtggcag 300
 caagcagctt gcgcatgtgg cctgtctacc ggccgccggc ccgggtaggc gggcgagccc 360
 cgtcgtcgga tggatccgtc ggctttcggg ttcttcagcc gtggagtctc gtgcgcgcgc 420
 gggacgggac tc 432

<210> 5170
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F3

<400> 5170

attcacgggt cgacccacgc gtccgaaaca atgcgatgag agccttggtc ctccctgggcc 60
tcttctgcat cgtgcatggt gagaaggaag agtcaaaggg catcgatgcg aaagcgtccg 120
ggcctgggtgg gtccttcgac atcaccaagt tgggcgcctc cggcaatggc aagacagaca 180
gcacgaaggc tgtgcaggag gcatgggcat cggcgtgcgg cggcactggg aagcagacaa 240
tctcatacc caagggcgac ttccttgctg gacaactcaa cttcacaggc ccttgcaagg 300
gcgacgtgac catccagggt gatggcaatc tgctggcgac cacggaccta agccagtaca 360
aggaccatgg taattggatc gagattctac gcgtggataa cctgggtcatc aacgg 415

<210> 5171

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-F4

<400> 5171

ggtcgaccca cgcgtccgcc acgcgtccga ctccctccac ctcgacgggt acgccttctt 60
cggcgtcggg atggggcctg ggacgtggtc gccggagatg aggaagacgt acaacctact 120
ggaacacggtg agccggcaca cgatccagggt gtacccgcgg tcatggacgg cgatcatgct 180
gacattcgac aacgcgggca tgtggagcgt ccggtccaac gtctgggagc ggtactacct 240
cggggagcag ttctacatca gcgtcatctc gccggcgagg tcgctgcgag acgagtacaa 300
catgcccgcac aacgccttcc gctgcggcaa ggtcgtgggg ctgccgctgc cgccatccta 360
cgcccccgcg cgctaaagac gacgaaggcg ccggtnttca cctcgtgt 408

<210> 5172

<211> 425

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-F5

<400> 5172

ccacgcgtcc ggatcgatcc aagaggagga ggtgtgtccg tgcgtacgtg tgtgcagcga 60
gcagctaggg catatgcatt atttcagaag agaactagct actccgatca agatgagcga 120
cgaaggattg tacgtatatt gctgagagga gatcgaagag acggtgatga gttggcgga 180
gatcgatgca tgcgtggatg atcatcacag ccaatcgtac gtgtgtaaaa ggtcggccgg 240
aggggggaat aatcgtgcat gagacacctc tctcgctcgc tcttcctctc ctacgtctta 300
attcattggg ttcgtcgatc cgagatccta cgtacgtcgt cgtttttgta ttgtatatat 360
tataggatcat catctcgtgn gggatcatcan atctggccgg tttgggtggg tggttgaatt 420
tgtaa 425

<210> 5173
<211> 373
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-053-Q1-E1-F6
<400> 5173

ccacgcgtcc gcagaacatc catccgagct aagtaattag gtcgaaaatg acccgtgccca 60
gcagcagtag cagcagccgg cgtgtgacgc tggtagtgcg cggctctccgc ctgctgcttc 120
tggttgggtg tgcgcaggcg gtagtggagt tggtagcctgc tgatgataat atcgccgccg 180
ccgctgctgg cacggcggtg gacgatggcg agccgcctca gcagtgcgcg accccggtga 240
gcgtggagga ggcgtgccgc ggcgcgtccg agacgcacgc cggcgtggcc tacgaccact 300
gcatggcgtc gctgggccc gaccgcgca gcaaggaggc cggcaacaag aacatgcacg 360
ggctggcggt gct 373

<210> 5174
<211> 380
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-053-Q1-E1-F7
<400> 5174

ccacgcgtcc gacggaggcc aattctccaa ctctctccct ccgtcgatca tccagcacca 60
gcaggagaat cccgtcgaat cccctctca accaagggcg cgcgcgcgtg cgtatgcctc 120

ctccagatcc aaagcaacag acagcgaggg ggcaccgggg tccgccgcat gtttgcgatt 180
tatggaggat catgctttct tgcttactac attagctcct gacgcgccgc cctcccctcg 240
cgttcattga tttctgttat aattactacc gagctactat ctccacatta ttattggtaa 300
agaaagaaag ggcgcctcct ctaatttgat gggcattccg tttccttctc aacttcaacg 360
ccaacaacag ttgatgctac 380

<210> 5175
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F8

<400> 5175

ccacgcgtcc ggatggggtt tgctagaggt tcttgacaaa atttctccag ggtcagttaa 60
ctggaagcat gcatccaaac caccaatcat tatgccgttt agaaagggtg aaaactgcaa 120
ccaggttatc aaaatcggca aggagctaaa cttttctctg gtaaagttag caggaaatga 180
tattgtgcaa ggaaacaaga aactgattct agctttcctg tggcaactca tgaggactag 240
tattcctaaa ttgctgagga acttgagatc cactctaaa gagaaagaga tgacagatgc 300
tgacattctc atttgggcta atagcaaggt caaggaatca ggcaaaaatt cacatattga 360
aagcttcaag gacaaaacga tagcagatgg ggtgttcttc cttgagctcc taagtgtgtg 420
gc 422

<210> 5176
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F9

<400> 5176

ccacgcgtcc gcaacgtcat ggactgcacg cttagaaga cggccaatgg cgtccgcac 60
aaggcatatg aggacgtgc ctccgtgctc accgcctcca agatccacta tgagaatata 120
aagatggagg actcgggcta cccatcatc atcgacatga agtactgccc caacaagtta 180
tgcaccgcca atgggtgcctc caaagtcacc gtcaaagacg tcaccttcaa gaacatcacc 240

ggcatctcct ccaccccgga ggccgtcaac ctgctctgct ccgccaggat cccatgcacc 300
 ggtgtcacga tggacgacgt caacatcaac tacagtggca ccagcaacaa gaccatggct 360
 gtatgcaaga acgctaacgg cagcgccaaa ggttgccctga atgcgctcgc atgc 414

<210> 5177

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G10

<400> 5177

ccacgcgtcc gcggacgcgt gggcggacgc gtgggtcgat cgaccgcctc cgtgtccgtg 60
 ccctacagct ggtcatgagc gcccgcctaa ccatggcggc ggccggcgcc gtgcgcgcct 120
 ggggtggtggc gctggcgctg gtgctggcgt gcgcgctgct ccagccgcgg ccgtccgacg 180
 ccgcggcgca gcccgccccg cagtcgccgg cgacggcggg gtcgtcgggc gccgccaagc 240
 ccaagtgcgt ggccggcgcc aggaacgacc acgcgtgccg cgtcggcgcc gtgcacgacc 300
 cggacagcca ggaggaggag ggctccagcg tcaccatcga cgcgcccgc gccgcgcccc 360
 acgacgtcgg ccacgacgac ggcagcgact acaacgacct cgacgtgccc aacaacgacc 420
 agtcgctcgt cgtc 434

<210> 5178

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G11

<400> 5178

ccacgcgtcc ggccggcattt cgaataacac aggtgagcgc gacgatggga tccctcgcta 60
 ataacatcat ggtcgtgggc gccgtccttg cggcgctcgt cgccggcggg tcgtgcgggc 120
 ccccgaaggt gccaccggc cccaacatca ccaccaacta caacggcaag tgggtcaccg 180
 ctacggccac ctggtacggt cagcccaacg gtgccggcgc tcctgacaac tgcggtgcgt 240
 gcgggatcaa gaacgtgaac ctgccaccct acagcggcat gacggcgtgc ggcaacgtca 300
 ccatcttcaa ggacggcaag ggctgcagct catgctacga agtgagatgc aaggaaaaac 360

ctgagtgtctc gggcaatcca gtcacggtgt acatcactga catgaactac gagcctatcg 420
ctccctacca c 431

<210> 5179
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G12

<400> 5179

ccacgcgtcc gaacgcgtcg catccgctcc acaggatcct ctgcgccacc gcaaccgtgt 60
gaccgcccgt gccgccggcg atcccgatcc gccgaccctg cccagccccg ctgcgagcca 120
tgtcgccgtc ggagccgacg cgggaggaga gcgtgtacat ggccaagctt gcggagcagg 180
cggagcggta cgaggagatg gtcgagttca tggagcgcgt cgcgcgctac gccggggggcg 240
ccggcggcgg ggaggagctc tcggtggagg agcgcaacct gctgtccgtc gcctacaaga 300
acgtcatcgg cgcgccgagg gcctcgtggc ggatcatctc ctccatcgag cagaaggagg 360
aaggccgcgg gaacgaggcg cagcccgcat ccat 394

<210> 5180
<211> 433
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-G2

<400> 5180

ggtcgaccca cgcgtccagt cacagtgtac atcactgaca tgaactacga gcctatcgct 60
ccctaccact tcgacttgag cggcaaggcc ttcggctccc tggcaaagcc cgggctcaac 120
gacaagattc gccactgcgg catcatggac gtcgagttca gaagggtgcg atgcaagtac 180
cccgccgggc agaagatcgt gttccacatc gagaagggtc gcaaccccaa ctacctggcc 240
gtgctggtga agtatgtggc ggacgacggc gacatcgtgc tgatggaaat ccaggacaag 300
ttgtcggctg agtgaagcc catgaagctc tcttggggcg ccatctggag gatggacact 360
gccaaggcgc tcaagggcc cttctcctc cgctcaaca gcgagtcgag caagaaggctc 420
atcgccaaag acg 433

<210> 5181
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G3

<400> 5181

tccagaattc acgggtcgac ccacgcgtcc gcaacggtgt cgactgctca tgacgagagc 60
tgctggaagg acgacgacca ccaccctatc tgctttcccg aagactgcgt ggcgacctgc 120
caggatcacg gccacgcgga cggccgctgc aactgggcat ggtcgtggag gccgtattgc 180
cagtgcctgt tggcggactg ccaataggcg cgaacagctg cgtcgcattg cgtcctggct 240
gcctcgccgg ccgatgaagg atgaacggtt gcggccgatg atcgatgtgt ccgtcggcat 300
gtcgatcact cattgaaacc ccttctaate ctgtgcggtg ttattttcat ggcacctgtg 360
gccattaaag atccatggac acgtacagta ccaatacatg attcttcaca gttcaactat 420
cgatgatact gttcatgg 438

<210> 5182
<211> 415
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-G4

<400> 5182

ggtcgaccca cgcgtccggt tctagatcgc gatctagaac gaagactgca atgtttacac 60
ggggaagcgg ctgcacgcgg cttgtttctt cgtgatggga ttctggctgc tggacttttc 120
caacaacacg gtgcagggcc ccgcacgcgc gctgatggcg gacctcgcag gcagccacgg 180
accagcacg gcgaacgcca tcttcgtgtc gtggatggcg atcgggaaca tcttgggcta 240
ctcgtcgggg tccaccgaca agtggcacac ctggttcccg ttcttcgaga cgaaggcatg 300
ctgcgaagcg tgcgccaacc tcaaggccgc cttcttggtg tccgtggtgt tcttngcct 360
gtccacggtg gtgaccatga tcttcgcccg cgagggtgccg ctggaccggg cggcg 415

<210> 5183

<211> 390
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-D5

<400> 5183

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 cgcccgtgcc gccggcgatc ccgatccgcc gaccgcgtcc agccccgctc gcagccatgt 120
 cgccgtcgga gccgacgcgg gaggagagcg tgtacatggc caagcttgcg gagcaggcgg 180
 agcggtagca ggagatggtc gagttcatgg agcgcgtcgc gcgctacgcc gggggcgccg 240
 gcggcnggga cgagctctcg gtggaggagc gcancctgct gtccgtcgcc tacaagaacg 300
 tcacggcgcc ccgcagggcc tcgtggcgga tcattctctc catcgagcag aaggaggaag 360
 gccgcgggaa cgaggcgcac gcggcatcca 390

<210> 5184
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-060-Q1-E1-D6

<400> 5184

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 gaactacgag cctatcgctc cctaccactt cgacttgagc ggcaaggcct tcggctccct 120
 ggcaaagccc gggctcaacg acaagattcg ccaactgcggc atcatggacg tcgagttcag 180
 aagggtgcga tgcaagtacc ccgccgggca gaagatcgtg ttccacatcg agaagggctg 240
 caacccaac tacctggccg tgctgggtgaa gtatgtggcg gacgacggcg acatcgtgct 300
 gatggaaatc caggacaagt tgtcggctga gtggaagccc atgaagctct cttggggcgc 360
 catctggagg atggacactg ccaaggcgct caagggcccc ttctccatcc gcctcaacag 420
 cg 422

<210> 5185
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-D7

<400> 5185

ccacgcgtcc gatcgtcgtc gtctcactca ccccgcttc acgcctccct caccaaataa 60
ggccccgccc ttttccgaca ttcacagggg ggacaggaaa tcagcggcca tggcctcgat 120
tccggcgacg accttcgccg tcattctatc cgtcctcttc tgtgccgcgg ctggcaccgc 180
cgtcgacaac gacctccccg actacgtcat ccaggggccg gtctattgcg acacctgccg 240
cgccgggttc gtgaccaatg tcaccgagta catcgcgggc gccaaggatga ggctggagtg 300
caagcacttc ggcaccggca agctcgagcg ctccatcgac ggggtgaccg acgggaacgg 360
cacgtacag atcgagctca aggacagcca cgaggaggac atctgcgagg tggctcttgg 420
gga 423

<210> 5186

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-D8

<400> 5186

aattccgggt cgaccacgc gtccgaccac ccccgactcg tggaagctca acgagatctt 60
cgccaccggc atcgtgctcg gcacctacat ggccatcatc accgccgtct tcttctacct 120
cgccacgac accgacttct tcacggacgt gttcggcgtg aattcgatca aggagaacga 180
caggagctg atggcggcgc tgtacctca agtaagcatc atcagccagg cgctcatctt 240
cgtgacgcgg tcccggagct ggtcgttcgt ggagcggccg ggcttctctc tgctcttcgc 300
cttcttcgcc gccagctgg tggcgacgtg catcgcggtg tacgccgact gggacttctg 360
ccgcatccag gggatcggct gggcggtggg cggcgccatc tggatgttca gcatcgtcag 420
ctacatcccc ctcgacgtg 439

<210> 5187

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E1

<400> 5187

gggtcgacgc acgcgtccgc ccacgcgtcc gccacgcgtc cgatcttctc cgatccatca 60
acaatcgccg agagcgatcg agagataaat aaagatgaag aaagtggcat catcgtcagc 120
cgttctcttc gtgctagccc tgacgctagt ttgtgccccg ctgatagcag aggcaaagaa 180
gaagagagtc gccgccgccg ccgccgagga gaagaagggtg caggacaact tctgctcgac 240
actgtgagag ggcaggaagg ggatggacct ggtgggtgtgc aaggagtcct gcgacctctc 300
acagcgctcc aacctgggtgc tgtacggccg gattcagtgc aagggcaagt gcaccgagca 360
gaagggcatc accgcgccgc agatgaagggt gtgccaagag gcgtgagac 409

<210> 5188

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E10

<400> 5188

attcacgggt cgacccacgc gtccgaccac cacaagggtg agtcggagga cacgctgtgg 60
aagaagggca tcacccctcg ggagaagtgc aggatcccg gcgagaggga ggcggagacc 120
ggcgagcccc tcgacccgc cgacgagatc gccgccggca gcttccgccg gtccagctac 180
tcccggcccc tgtcgcgggtc gagctcggtc gccgtgtacc accaccaaca gcagcagcac 240
cagcacgaca ccccgccgc cttgcatgcc tcggattctt gacagcccct cgagacccga 300
gtataaatgt ataatactat tacgtacgtg ttaggcgtc gaaggggaga aggatgctac 360
tatgcctacg ggatgtaatg tgcattcaaa ttcagatgta attgctctat aattctacta 420
ggtgtgtgcc 430

<210> 5189

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E11

<400> 5189

ggtcgaccca cgcgtccgcg caggcccatc ggatccgttt cgagttccac aaggagacag 60

cggagcacac gttcatgagg atcgacgggg agccatggaa gcagcctctc cccaaggagg 120
 acgacaccgt ggtggtggag atctccaacc tccgtcaggt ggccatgctg gccaacgacc 180
 cgtgcaggtc caagagcgtg aacgagccgt cctccccgtc gtgccacggc catgaggacg 240
 acgacagcaa cagcctggag gacgaggacg aggacgagtg ggaggacggg aggaagaagt 300
 tcggtgcggc ggccaccttc aagatccccg acgaggtgga catcgctcat ctcagttaga 360
 acctaaaaac cccg 374

<210> 5190
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E12

<400> 5190
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 tcccttcggc tcggcaaaca catcaagtcg cgatggagat gaagaaggtc gcctgcgccg 120
 tcctcgccgc cgccgcctcc gccaccgtgg tcctcgccgc cgaggccccg gcgccccgcc 180
 ccaccagcgc ctctcggcc gcgttcccgg ccgtcggcgc cgtgctgggc gcctccgtgc 240
 tctccttctt cgcctactac ctgcagtaaa attaaaggag ggtcggaggg agatgctgct 300
 ggctgccatt gcctgtattc ggttgattc cgtttatata tatatttaag tactttaatt 360
 tgggtctgaa catgtcgatt gatccattca tt 392

<210> 5191
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E2

<400> 5191
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 gtcgtcgcca accgtagcaa gaacatcacc accgcccagc aataatggcg cagagcatga 120
 ggattgtggc gctggccctg gtggccctgc tgggtggtggc ggcggcggcg cccgtggcca 180
 ccgcgtacgg ctgctacgac gactgctacg agcgtcgcgc caacggcaag aaagaccccc 240

cctgcaccaa gatgtgcaac caggcgtgcg gctccacgga tcagggcgcc ggtgccgccg 300
 gcgcccgcgc ggcttgatcg ccacgcgcgc tcatcgcttc agctcgatat aatcgctgct 360
 ccgtcagcaa ccacatatg attcgatcaa ttttctctct ctaatttctc gaccccgctcg 420
 aatttttttt cct 433

<210> 5192
 <211> 417
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-E3
 <400> 5192

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 tgacangatg tcgtggcaga catacgtcga tgagcacctc atgtgcgaga tcgagggcca 120
 ccacctgacc tccgctgcca tagtcggcca cgacggcgcc gtttgggccc agagcaccgc 180
 attcccacag ttcaagacag aggagatgac caacatcatg aaggacttcg acgagcccgg 240
 gttcctggcc ccgaccggcc tcttctctcg cccaccaag tacatgggtca tccaaggcga 300
 gccggcgct gtcacccgcg ggaagaaggg atctggaggc ataactgtga agaagacagg 360
 gcaagcgatg gtggtcggca tctacgacga gcccaatgac cccggggccag tgcaaca 417

<210> 5193
 <211> 446
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-060-Q1-E1-E4
 <400> 5193

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 ctcccccggc tcccggggcg ggcgctctcc tgttctctct cctctgctg ctggtgccag 120
 ggccgggagg gcggcgcgga ggtggcgctc atggggctcg ccggggacgg gtcggcgga 180
 accgccaacc tcagtaatag tgaaaatggt cggttcagtt atggagttgc aagttctccc 240
 gggaaaagag catcgatgga ggacttctat gaggcaagga tagacgacgt tgacggagag 300

aaagttggaa tgtttggtgt gtatgatggt catggaggag tcagagcagc tgagtacgtt 360
aagcagcatc ttttcagcaa tttaatcaaa cacccaaagt tcatcactga ttacaagggc 420
gctattgctg aaactttaca acgcac 446

<210> 5194
<211> 406
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-E5
<400> 5194

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tcctcgaacg ccaggttcct tggaccacta tatccaggag cgacgaagtg atccacccgc 120
cagccatgga gatgaagaag gtcctctgcg ccgccctcgt cgccgccgcc tcggccaccg 180
ccgtgctggc ctcggtcgcc tccgaggcgc cctccgaggc gcccgccggc gcggccggtg 240
gtgcggtggt ccctagcgca agcggcgccg ccgccgccgc cgtgcccgcc gccggggcgc 300
tcgtcgctc ctctctcgcc tactacctcc actgagcgac gacgcgcggg gcggcaacgt 360
tgggatgcat cgtgtttggt tcatccgatt aattaattgt tttttt 406

<210> 5195
<211> 431
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-E6
<400> 5195

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ccccagcggg tgggcgtggt ccatcaacca gtgcagggtc ttccgctgga acctgacggc 120
cagcgcggcg cgGCCaacc cgcaggggtc gtaccactac ggccagatca acatcaccgc 180
caccatcaag ctgcctatgg gccgcggcaa ggtcgacggc aaggagaggt tcgccttcaa 240
cggcgtgtcg cacgtggacc cggaaacccc cgtcaagctc gccgagtact tcaacgccag 300
cgacggcgtg ttcaagtaca acctcatcgg ggacgtgccg ccctccaaca cggccccccac 360
caagatggca cccaacgtca tcagcgccga gttccgcacg ttcattgagg tggctctcga 420

gaaccccgag a

431

<210> 5196

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E7

<400> 5196

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gccctcaggc aagccgaccg ccgacgtacc accgcgcca cccgagagaa agatggagat 120
gatcaagagg atcctcatcg ccgcgctcct cgtagtcgcc gtctcggcca ccgcagtgtc 180
ggcctccacc gagggcgccg ccgcggcgcc cccagccgcc tccgagtcgt cggcggtccgc 240
cgaagcccc gctggcgccg ccggcgccgg cgccggcacc ggcaccgccg cggggccctc 300
cgccagcggc gccgcgccc ccctcgccgc cgcgccgcc gcgctcctct tctcctcct 360
cgctactac ctgcactaag cggacggacg gacggacgcg cgcatggcat tggcatgcat 420
ggactgttga acat 434

<210> 5197

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E8

<400> 5197

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tgcccaagct gagttcccc accccaaca aacaattact agagtagctg cattggcggg 120
gaaattaaag cgctagaagc tcagcagcaa tggcgagca ggcgggcgtc ggaaggtact 180
ggtgccacat gtgcgcgcg gccgttagcc ccgcggagg cgaggtggag atgaagtgcc 240
cgttctgcca cagcggcttc ctcgaggaga tggagaccgc ccgcggggcc gcgaccgacg 300
acggtgacgg cgacggcgcg gtggctcagg tgcaccccg cgccgaccgc ccgagctcca 360
tctgggcgca cgctatctc agcacggtcg acagctccgc ccgtcgccgc cgcaaccggg 420
gggagcagga 430

<210> 5198
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-060-Q1-E1-E9

 <400> 5198

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 aagaggcaga cgtgtccaaa gccattcgag gttacatcac tgcaaacaag atccagagca 120
 ttgcgctcgg cggagccaac agaaatgcgt gcaccaagaa attcaagaac gcggacgtgc 180
 cgtcgaccct gatgaagtgc gctccagact actgcaacat ctacgtcgtg ggcaagggca 240
 agtccgtcaa tgtcaggctc gccaaagtgcg gcgtcccgcc gatgcacact ggcgccgaca 300
 tcgcttcgga caccgactca ctccgggaat cgggtgctcta catgcgacgc ggctccagtg 360
 gggcactgcc gcgggtgacg ccatgacgcc tggcgctcca ttgacaggcg cacaccgc 418

<210> 5199
 <211> 424
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-060-Q1-E1-F10

 <400> 5199

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 caaataaaac cgagagacct cagccctcag gcaagccgac cgccgacgta ccaccgcgcc 120
 aaccgagag aaagatggag atgatcaaga ggatcctcat cgccgcgctc ctcgtagtcg 180
 ccgtctcggc caccgcagtg ctggcctcca ccgaggccgc cgccgccggc gcccagccg 240
 cctccgagtc gtcggcgctc gccgaagccc ccgctggcgc cgccggcgcc ggcgccggca 300
 ccggcaccgc cgcgggggccc tccgccagcg gcgcgcgcgc cgccctcgcc gccgcgcccg 360
 ccgcgctcct cttctccctc ctgcctact acctgcacta agcggacgga cggacggacg 420
 cgcg 424

<210> 5200
 <211> 436
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F11

<400> 5200

tagccgtcca aaattctagg gtcgacccac gcgtccgcac accttctata acgaactccg 60

tgttgcgct gaagagcacc ctgtgctgct gaccgaagcc ccactcaacc caaaggctaa 120

caaggagaag atgacccaaa tcatgtttga gactttcaat gttcctgcca tgtatgtcgc 180

catccaggct gtgctttccc tgtacgccag tggacgtaca actggtattg tattggactc 240

tggtgatggt gtcagccaca cagtgccaat ctatgaaggt tatgcccttc ctcatgccat 300

cctgcgctt gaccttgctg ggcgtgacct gactgacagc ctgatgaaga tcctcactga 360

gagaggttac tccttcacca cctctgctga acgcganatt gtaagagaca tcaaggaaaa 420

gcttgcata gtggct 436

<210> 5201

<211> 435

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F12

<400> 5201

attctagggc cgaccgacgc gtccgacacg cgaccgctgc agttcaacct ctgacagatg 60

cagctaagga ttttctcgct gtaaagtaca aggatttgat taagttcaa gatgaagtga 120

tgaacatccc tcgtgctgga atcgaagcca tcttgtaag taatgacctc caggtggcat 180

ctgaagatac catctatgac ttcttactca gatgggcccg tgcacaatac ccgaaatcag 240

aagagagacg tgaggctcctt agttctcggc tgctccctct tgtgcgattc agtcatatga 300

cgtgtangaa gctgcggaag gtcctagcct gcacagatat agaccacgag caagcaacca 360

agtgtgtcac cgaggctcct ctgttcaaag ctgatgcacc acaccggcaa cgagctcttg 420

cagcggacgc aataa 435

<210> 5202

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-F2

<400> 5202

cgggtcgacg cacgcgtccg accacgcctc cgggggcaag gccaaagttca agggccaaaa 60

gaaaatacaa gaaccgggtg attcaatcaa aaagaaagga taacctggca aaaccttgaa 120

acaagtgggc cccaaggggtg ccaagttctt tcaaggaaaa ggacccggtc caacggctga 180

tggccacgtc gtcatgacgc taggcttctt cacggcgatg ccgcctgacc caccggcccc 240

tgccgtcca ccacctgccg ccgccccgga gtcgaaggaa gacaaagaat cggaccattc 300

agactcctcg tcattcttctt cttcagacga cgacgaagat aacgaggagg aggaaaccga 360

ggagcaatga taagggcggg tgtgttcaac ttcgaaggct tcaaacg 407

<210> 5203

<211> 427

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F3

<400> 5203

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cttcgtgggc ggggagcgcc tggacatcnc gcaggagatc tgggatgccg agaaggtggt 120

cggcggcggc gtcattcttg acacgagcac gtcggtgacg tcgctggtgc cggaggcgta 180

cgcggcggtg acgagcgcat tggacaggca cctgtccac ctgccgcggg tgtacgagct 240

ggacggcttc gactactgct acaggtggac cttcgccggc gacggcggtg acctggcgca 300

caacgtgacg gtgcccaggt tgacggtgga gatggccggt ggcgcgaggc tagagccgga 360

agccaagagc gtggtgatgc cggaggtagt gcccggggtg gcgtgcctgg cctttaagaa 420

gctgccg 427

<210> 5204

<211> 418

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F4

<400> 5204

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aacaaccccc cgccggaaaa caacaacgtg gtgctcatcg gagactggta caccaaggac 120
cacaaggtgc tagcccgcca gattcgacgc cggcaagggc gtgggcccgc ccgcggggcgt 180
gctcatcaac ggcaagggcg gcaaggacct ggaggccgcg cctgccttca ccttcgaggc 240
cggcaagacg taccgcctcc gcgtctgcaa caccgggatc aaggcgtcgc tcaacttccg 300
catccagggc cactacatga agctggtcga gctggagggc tcccacaccc tgcagaacac 360
gtacgactcg ctgcagctcc acgtcggnc a ctgcctctcc gtgctcgtcg acgccgac 418

<210> 5205

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F5

<400> 5205

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ccaccacgga gtccaccgc tactccatcc tgtggacgcc cgccgccgtg gccttctacg 120
tggacgacgt gccggtgcgc gaggtgcggc agtcggccgc catgggcggg gacttcccct 180
ccaagcccat gtccgtgtac gccaccgtgt gggacgcctc cacctggggc accgccgggg 240
gccggtaccg cgtcaactac cgctacgggc cttcgtcgc ctccctcacc gacctggccc 300
tcctcggtg ccgcgttgac gggcccatcc agcagacgac ggcggagcgg tgcgccgag 360
ccgccgaggc actcanggcg tcggacgtgg ccgtcatgac ggtggagaag cagcaagcca 420
tgcg 424

<210> 5206

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-F6

<400> 5206

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ctccccgacc gccacatcta ttaggtgcag ccatgggtgc ctgtgcaacg aagcctaaga 120
cgcttgaggg gaaagcccca gctgaggcca ccatctccac acccaaggtt gcacctgaga 180
ccactaccat ccacattgag gttgcggcaa aacatgcagt agttgagaag gtggaggagg 240
acaaggagga ggcactaaca gtggcggcga aacaagagcc agcagccacc attgagcctc 300
agcagattgc tagtgaggtg accacttcgg aagtggcggc cgtcgttgtc gagcctgaga 360
acaaagagga ggaggaagtt gtggagaaga ccgtcatcga gaaggagaag catcagcag 419

<210> 5207

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-F7

<400> 5207

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tatatataac tcataatttc aatgaattct taattaaatg aaaaatgaat gcaagcattc 120
cctgcatgcg atggcacctc acgctggggc tgcattgctg gttcatatca tgtttgcaag 180
agccatgcag ttgttgacca tctgggtgag ctccttgta aacttcccca tgggggttggg 240
gacgccggcc tgggtgaagg ggcggctgca cgagtcgaag tcctggacgg cgagctgcag 300
catgatcttg gcggtgccgg tgtccttgaa cgtgatggcc cgctgcgccg cgccgatggt 360
gtcctgcgtg ttcattgaca tgggtgctga gaacgtgagc gcctgcgtct gctgcggcgg 420
gatggtgcgg gc 432

<210> 5208

<211> 392

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F9

<400> 5208

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tgcgttgta cccacccatc aagggtgggg ccgccagcag gttcagccgt tcctgttctt 120
 gctaaaacga gagaaggatg gcagtgtctc anggagctgt cctattcttg tttctcctcg 180
 tcgcagcaga ggtgggaacc atcgatgcc aatgggagt agccatgcc atgcatgcct 240
 tgataatgga gaaagcgaag cagcaggaga cggagaagaa ggaggagaaa agcacggaga 300
 aggaagagag tcaatgctta tcgccgagtc tccagttcga gggcttctgc ttcaacagcg 360
 acagatgcgc cgatgtgtgc atgaaggaga gc 392

<210> 5209

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G10

<400> 5209

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 atcgatggcc gcgacggcgg cggaggagat ggagaggatg gtggaggcgg agtgggagga 120
 ggggatgagg aagaggaagc ggtacgggct ggtggagtac cgggcgctgc cggcttacct 180
 gcgggacaac gagtacatcc accgccacta ccgctgcgag tggccgctcc cgcaggttct 240
 gctctccgcc ttctccatcc acaacgagac cctcaacgtc tggacgcac ttataggatt 300
 tttcatcttt ctgctctga ccatatacac agcaacacaa gttccaaatg cagtagatat 360
 ccggagcttg cagcatttgc cagatgtact gagaaaggct gatatt 406

<210> 5210

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G11

<400> 5210

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 gtgtgccttt tggagacgcg atgtcgtccg gcaacaagat cagcgtggcc ttgctgagcg 120
 tggccctagt gggcctgctc ctctgccacc tcgccaccac cgctccgcc caccagaaag 180
 acatccacgt cctcggcagc gtcgacggct ccagcgacgg cagcagcccc gaggccgaag 240

gccgcgtcgt ctacgcggac atgaagctgg ctgatacggg atccgatgcg ccggcgccgg 300
 cgccggcgcc ggggcccgtcg tccggttgaa ctgagaagcg tgcgtccagc caagcaaggt 360
 ggtcaaaacc gagaactaat taagggctcg atcgtgtgtc aggctactac tgttcatgcc 420
 ataattatat atagatacg 439

<210> 5211

<211> 376

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-G12

<400> 5211

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 cgatcccaaa gtatcgtgat actaaagtca ggacaaagga acccctagag caatattacc 120
 aaaccaagga cgatactgac tacttatggt acaccacaag cttttcgctt gagtccgacg 180
 atttgccctt ttagaaatga catccggcct gtgcttcaag tcaaaagtag tgcacacgca 240
 atgatgggat ttgctaataga tgctttcgta ngatgcgcgc gcggaaacaa gcaagtgaag 300
 ggtttcattg ttgaaaaacc ggttgatctg aaagtangtg tgaaccatgt cgtattgctg 360
 tcgtcaacta tgggaa 376

<210> 5212

<211> 428

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-G3

<400> 5212

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 gaggatatca accgccggca gaccatcacc gtgctcgccg tggacaacgg cgccgccggt 120
 ggcattctct cctcccatc agacgtccag cggaagggtgc tctccatgca cgttgtctc 180
 gactactacg acaccgcaa gctggaggcc atcaagaacc actccgccct gctgacgact 240
 atgttccagt cctccggcca ggccaccgac cgcattgggt tcttcaactt caccaagcgc 300

tccgacggtg tcatggtgtt cggctccgct cagcccggag cgcagatgac ctcccatatg 360
gtcaagtccg tcaattcneg cccgtacaac atctcagtgc tgcaggtcag cgcccccatc 420
gtgccgcc 428

<210> 5213
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G6

<400> 5213

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gcggcgctac aaccagtttg aaaccagtc tgctgctagc atggcacctc gtgtggaccc 120
tctgcaagct gtgcagactc ctgttgatga catgatgcgt catgcgtatg ttgacccaaa 180
cgatcctacc aagatcttcc ttcagcaacc tgcgccagaa tcgcagctga ggaggaggaa 240
ctaccacggc ccagctgatg caaattagcg cttggctgga ttggcagaac tcatgctcaa 300
ttaagtgtg tgtccatttt agcatttcac ctatccttgt cgtttaccac aactgacttc 360
catattcggg taccctgtt tcctgtgacc ttacatatat aggacataat gttgcgagtt 420
ctcgcaatat ggtat 435

<210> 5214
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G7

<400> 5214

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cacatctatt aggtgcagcc atgggtgcct gtgcaacgaa gcctaagacg cttgagggga 120
aagccccagc tgaggccacc atctccacac ccaaggttgc acctgagacc actaccatcc 180
acattgaggt tgcggcaaaa catgcagtag ttgagaaggt ggaggaggac aaggaggagg 240
cactaacagt ggcggcgaaa caagagccag cagccaccat tgagcctcag cagattgcta 300
gtgaggtgac cacttcggaa gtggcggtcg tcgttgctga gcctgagaac aaagaggagg 360

aggaagttgt ggagaagacc gtcatcgaga aggagaacca tcagcagtc atgcagagga 420
 aaatattgcc accaac 436

<210> 5215
 <211> 400
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-060-Q1-E1-G8
 <400> 5215

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 gagagataaa taaagatgaa gaaagtggca tcatcgtcag ccgttctctt cgtgctagcc 120
 ctgacgctag tttgtgcccc gctgatagca gaggcaaaga agaagagagt cgccgccgcc 180
 gccgccgagg agaagaaggt gcaggacaac ttctgctcga cgctgtgcga gggcaggaag 240
 gggatggacc tgggtggtgtg caaggagtcc tgcgacctt cacagcgctc caacctggtg 300
 ctgtacggcc ggatccagtg caagggcaag tgcaccgagc agaagggcat caccgcgccg 360
 cagatgaagg tgtgcccaaga ggcgtgcgac aaggactacg 400

<210> 5216
 <211> 401
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-060-Q1-E1-G9
 <400> 5216

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 gacctcagca tgcccgcggt cctccagatc gcgcaggaga aggccggcat cgtgcccac 180
 tcctaccgca ggggtggcgtg cacgaagcag ggcggcattc ggtacaccat caccgggaac 240
 aagtacttca acatggtgac gatcaccaac gtgggcggcg ccggcgacat cgcggcagtg 300
 tcggtgaagg ggagcaagcg cgtaagtgg acggagatga atcgcaactg ggggcaagtg 360
 tggcagaccg gggaggacct cacatgcgaa tcgctgacgt t 401

<210> 5217

<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-H3

<400> 5217

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caactggggg caagtgtggc agaccgggga ggacctcacc tgcgagtcgc tgacgttccg 180
ggtgatgacc agcgaccacc gcaaggccac ctcatggcac gttctccccg ctgactggaa 240
gttcggtgtc acgtaccagg catccanaga acttctaagt agccactttt cctcctcttc 300
ttcaacctgc atatgcccac aagcaaccat gcagatgata acatgcatca tgcatgcata 360
ttcattcttt cgctcatgca ttccgatatg gtgccggagt taanaaatg taaatcaatg 420
tgcaaactca aatgacat 438

<210> 5218
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-H6

<400> 5218

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agctaggtag aggggcaaag gaggagtata gcggagaggt tgatgctga cggaggaggc 180
gccatggacg tcgacatgca agcccgcggt ggcggtgcta gccatggcgg cgaacttgac 240
gacgacggca aggagaagag gacagggacg gtgtggacgg cgtcggcgca catcatcacg 300
gcggtgatcg ggtccggcgt gctgtcgtg gcgtgggcga tggcccagct gggctgggtg 360
gccgggcctg tgatcctgct gctcttcgcg gccatcacct actacacctc ctgcctcctc 420
aacgactgcc tacgc 435

<210> 5219
<211> 425

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-060-Q1-E1-H7
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 agcacctcct gccgcggccc ctgcgtcatcg agctcccgtc gtcgcggggcc gaggacgagg 180
 acgagccccg cgccgacgcc gtgccgcggc acgtgctgtg cgccagctgg cggctggcgg 240
 cggaggccaa caacctcgcg ccgtggaggc cggtgccgcc ggagtgcgcg ccgcacgtgc 300
 gggactacgt caccggcgtc gcctaccgct ccgacctcga cctcgtggcg cgggagtcgg 360
 ccgcctacgc gcgcgcccgt gcgcgctcg gggccgacgg gcgcgacgcc tgggtcttcg 420
 acgtc 425

<210> 5220
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-060-Q1-E1-H8
 <400> 5220
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 cgccggcgcc gtggcggaga acgtgtgcaa gctcccggct ctgcgcaact tcagcttcgc 120
 gcacaacttc ttcagcgctc aggcagaggc gtgcgtgccg tccgaggact cgccggtggc 180
 gctggacgat agcggcaact gcctcgatgg cggacgcccg gggcagaagc cgttgccctga 240
 gtgcgcgctt gtgctcgcg cccccgtcga ctgccgcacg aacgtctgtt ccaagatgcc 300
 tgcgccacca gcgaagaagg ttcctaggcc accagacgtt agtccacatc cgttgccacc 360
 agcgcacatc ccgggagaac aaccaccaa gaagtcccca gcaccacagc cagtgcgccc 420
 aaaag 425

<210> 5221
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-A1

<400> 5221

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gccccagccc cagaccaacg acgagaaagg acaatctgcg gcggacctac ccgaagtcgg 120
aggcagggca aaaggcccga tccccctcc cgcgcggttg ccgcgctcgt gccacggtgc 180
gctagccccg tcgacgccgg cggacagcgt gcactatggg ttgctcctcc tccgtgccag 240
ctacaaatac tggagggctg aacactatca gcaacgatag ctctccagcc atcagttcaa 300
aggacttgcg tgctaagttg gtattgctgg gagactcagg tgttgggaaa agttgcattg 360
ttcctcgttt t 371

<210> 5222

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-A10

<400> 5222

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tggtggcagc gggaattctg tagggcaaac gaaaagcaac caaatgagct ggtcaaacac 120
gtctaatacta atgggcacga actcaactga cagctatttg aatcagagca ttgcagctct 180
aggtttcgga aatccaaatg gaggattgag cacaggcttc tccaatccaa gtagttccag 240
tacaggcctg agcatgatgc aacccaaatc tgattctgga tcaactgtcga cgtcgggtcaa 300
caatgccgca catgggctgc taagacttgc cctcctcca tccacatcgg ttggaagagg 360
gcgcggtaga aatcaaggac agtccgcact ctcccagca acaaggcctc atgccaaactc 420
ggcatcagga caacaacct 439

<210> 5223

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-A2

<400> 5223

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 tgatcatctc taaagctaac atgacatccg gcatttcag tgcagatgtt cgtatggacg 180
 tcaagatddd gaaatcccta tcagggcaac ataatctcgt catattccat gatgcatgtg 240
 attgaccctt caatgtctac aatgtcatag tactaagtgc aggtgaagac ttgctagaca 300
 gaatdddacc aaaatgtggg agatatccat gggaatatgc catagctatc attgtacaga 360
 ttttgagcgt acaggccttc agtcatcatc atggagtaat gcatcgtgat ttgaagccag 420
 agaatdddct cgtcaca 437

<210> 5224
 <211> 429
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-061-Q1-E1-A4
 <400> 5224

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 cacgactttc aagacagcaa ccttcaactgc gcaaggcgac gggttcatgg cgatcgggat 180
 ggggttccag aacacggccg gcgcggagaa gcaccaggcg gttgcgctgc tggtgacgtc 240
 ggacaagtcc atcttctcctca actgcaagat ggacgggttc caggacacgc tgtacgcgca 300
 ctccaaggcg cagttctacc gcaactgcat catctccggc acggtggact tcatcttcgg 360
 cgacgcggcg gcggtgttcc agaactgcat cctggtgctg cggcggccca tggacaacca 420
 gcagaacat 429

<210> 5225
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-061-Q1-E1-A5
 <400> 5225

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 tcgacgctct ggtgcagcag ctgcgccgaga acgacgcggg acggcacggg acgccgccgg 120
 ccaagaagga ggccgtggag gcaatgccga ccgtggaaat cgccggtggc aatggcaacg 180
 atgacgacac ggccagctgc cccgtctgcc tggaggacta cgcggccggc gagcgcgctc 240
 gggagatgcc ctgcaggcac aggttccact ccaattgcat cgttccgtgg ctcgagatgc 300
 acagctcctg ccctgtctgc cggttccagc tgccggccac cgacgacaag ggctcatgca 360
 gcagcggcga cggtggtttt gtcagtgtcg acgcggatgg tgaaggcaat gacaacggcg 420
 gcggcgat 428

<210> 5226

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-A6

<400> 5226

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 cagatgggtgt gattctctgt cgccatgtga tacgtgacgg aacagtcgag gtagaggagg 120
 aggatgcacg gccggcattc tctccttcc tgttgaccg ccgtttatta atccctaact 180
 tttcatccct ttctatcagg ccctcctact agcctcaata ttgctagtcg ttgccgttgt 240
 ggcgtagatc taacagtact attggaata aatttgtaat acattgaggt cgatgataat 300
 atatatatat atattatata gtcgttgtgc actaatattt tattaaatat ttatgtgccg 360
 tcgtaatgac gggcacttta ctagtaacaa attaacacac gtctttgtg 409

<210> 5227

<211> 109

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-A7

<400> 5227

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 aactgtgat actcagagt cgccaagtac tccgtgggcg gacagtcca 109

<210> 5228
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-061-Q1-E1-B10

 <400> 5228

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 cgactaataa gcccctcctc ctctctgccc tggcgtccgc gtccttggt gcggcgccgg 120
 ccgccgcgaa cgcgcccggc ggggcgttca gcaactgggt ggcgatgaac cagcagagct 180
 acgcgctgta cgcgcagaag tccgtcgggg acgggggcaa ggagcccctg gacaagaagc 240
 tgtcggaggc ggagaagaag aaggtcacgt acgtggtgga ccccgagcgc aagggcgact 300
 acaccaacat caccgcggcg ctggaggata tcccggtag caacaccaag cgcgtgatcc 360
 tggatctcaa gcccggcgct cagttccgcg agaagctgtt cctgaacatc agcaagccgt 420
 tcac 425

<210> 5229
 <211> 133
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-061-Q1-E1-B11

 <400> 5229

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 aagagaaaaa aaaataaata aacaagaaag aaaaaatcaa aaatcaacaa aaaagggtcaa 120
 aaaaaatgca att 133

<210> 5230
 <211> 250
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-061-Q1-E1-B2

 <400> 5230

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tgtatatata tgcatgaagc ggatttatatt ggactgttgt actgtgtact agcttgttta 120
 ttccatgact aacatattgt tatattgact gggttgtttg tactgaaaag aatggatggc 180
 gcccgacaag cccaacccca acgagctcac cagcaccatc ataaaggggg gccgctctaa 240
 aggatcgaat 250

<210> 5231
 <211> 384
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-061-Q1-E1-B3

<400> 5231

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 catcggccgc gctcttggtg ctagccctcg cgctagtggc ggccaccgcc ccacaggtag 120
 cggaggcaaa gaagaagaga gcggcggaga gcggcgaggc ggcggaggcg aagaagatcc 180
 aggacgactt ctgctcgacg ctgtgcgagg gcaagaaggg gacggacctg gtcgtgtgca 240
 aggagtccctg cgcgctctcc cagcagtcca acctggtgct gtacggcagg atccagtgca 300
 agggcaagtg caccgagcag aagggcacatc cggcgccggc catgaaggct tgccangagg 360
 agtgcgacaa ggcgtacgtg gtga 384

<210> 5232
 <211> 386
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B5

<400> 5232

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 catcgatcat gaggcgtctc cgacggagct aaaagagacc gatcagttag cgggtggtgga 120
 ttgaagaatc gagggcgagg aggaagacag ggaggatgga ggaggtggag cagcagctga 180
 ccaagaaaca gatcgaggag ttccgggagg cgttcagcct cttcgacaaa gatggcgacg 240
 ggacgatcac gaccaaggag ctgggcacgg tgatgcggtc gctggggcag acgccgacgg 300
 aggaggagct gcaaggcatg gtggacgaag tggacgcgga cggcagcggc gccatcgact 360

tccaggagtt tctcacctga tggcgc

386

<210> 5233

<211> 450

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-004-Q1-E1-C8

<400> 5233

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gtgcgctcat cggcctcctc gtcgccgcgg cctccctcgc cgtcgcgctc tcggatggcg 120

gcgggatggc ggcgccggtg tacgggtacg cggcggggag cccaacggg ccggagaact 180

gggggaagct gagccccgcg tacaagctgt gcggggaggg gaagcagcag tcgccgatcg 240

acatcgtcac caagcaggcc gtcnccgcg ccaccctcga caccctcaac cgcacctacg 300

gcgccaccaa cgccacgctc atcaacgacg gccacgacat cacgctggcg ctcgagggca 360

aggttgggac ggtgacggtg aacggcaagg cgtacagctt cgagaagctg cactggcact 420

cgccctccga ccacaccatc aacggccaga 450

<210> 5234

<211> 439

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-004-Q1-E1-C9

<400> 5234

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cagctacaag gccgccgcta gcgggttcgc cgccaagctc acgccggcgc aggtcgccgc 180

gttgcagaag catcctgacg ttgtgcaggc gctgcctgac gtgaagtaca cccttgagga 240

caggaaccac ctcaactgaa ccgagtgcg ctttcaccaa cacgatacat agctcggcac 300

tagtgccatc tcatgttagc aagtgtgcat gtgccacac cctagggcca gaatttatat 360

aagcatgcta tgtgtgggct agtgatggta atttagtctc ttcatanaga ttgaatgctg 420

taccgggagc gtacgtaca

439

<210> 5235

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-D10

<400> 5235

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gcaccgcgag ggtggacgcc tcgtgctgcg gcagatgcgc ctgccgtcgc aggagctgct 120

gcagccctgc aaggaggacg gcaggttcaa gtcctcatg caccggagg cccgcgcgcg 180

gccgtgcggg ggcggcacac tgcaggaacg gcaagggaat gatagctagc gctcttaatt 240

gatcagctga tcagatgacg tgccgccacg cacacgtcgt cttgtatggg ctggctgcta 300

caatgcaacc ggtagatctc cctgcttagt ttcttgagat cgagggtccc agttcttgc 360

ttgcattctg caaccgttgt ccaaagtcc acaatcttg ccttccgtca aattttaata 420

catggtcgga acat 434

<210> 5236

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-D11

<400> 5236

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gtggcgcccc ttctctcct ctccctctc gtctccgccg cggccagtgc gcggaccgtg 180

ggcgacaccg tgcaggacgc gtgcagcaag acccagttcc ccaagatctg cgtggacagc 240

ctcgccgcca agccggagag ccagaaggcg acgccgcgca agctggcgga gctgttcgtg 300

aacatcgcg ccgagaaggg atccgggatg gccaccttcg tgcaccgcaa gtacagcgac 360

aaggaggaca gcgacatatt caagtgtac gacagctgct ccgacgacg 409

<210> 5237
<211> 466
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-D12

<400> 5237

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ttcgtctcga cctggctggc cgcgacctca ccgactacct catgaagatc ctgactgaac 180
gcggtacttc cttcaccacc actgctgagc gggaaattgt cagggacatg aaggagaagc 240
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gctgccctga ggtcctcttc cagccatcct tcattgggat ggaagctgct ggtatccacg 420
agaccaccta caactccatc atgaagtgcg acgtggatat taggaa 466

<210> 5238
<211> 463
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-D2

<400> 5238

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ctccatctcc agcatttgtt tctgattcac cttgctcaa tggctgttct ttctgctgct 180
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gcccagattg agtctgttct ggatcttgca ccgtgcacaa ttgtgtctga gctctccaac 360
acagagtctg actcaaatgt cagttctgag tcaagcttgt ttatctatcc tctgaagatt 420
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<210> 5239
<211> 461

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-D7
 <400> 5239
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 acacgtacga ctgcgtcgac gtccacgtcg gccactgcct ctccgtgctc gtcgacgccg 180
 accagaagcc cggcgactac tacatggtgg cctccacgcg gttcatccac gacgccaagt 240
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 agccaccggc cggctggggc tgggtccatca accaggccag gtcgttccgc tggaacctga 360
 cggccagcgc cgcgcggccc aaccgcagg gtccttaca ctacggccag atcaacatca 420
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<210> 5240
 <211> 171
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-D8
 <400> 5240
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 ggagatgatg tcaaagctgg agcagatggc tgagacagag cgcttcatgg t 171

<210> 5241
 <211> 436
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-D9
 <400> 5241
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 agattgatga tttgatgtaa ctttgaaccg ctctaactaa ctaaatacgtc ctcgagtgtg 120
 cggcgggtgc gagcaacaag gccgtccgct ccttgttcgt ccctgcatgt gttccgttcg 180

gttccatcaa ttccaccacg aaataaggct gtataaatct ttcttgggcg ttccctctct 240
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 cctgaccccc cagagcgaga gggaggggca cccagaggag cctgtcgttt tgatcgggtg 360
 ctctgcccc gtccccgca ggagagaaca acctggagaa aatggcgccg atctccggag 420
 ccacggcagt ccttgt 436

<210> 5242
 <211> 460
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E10

<400> 5242

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 ctttgtgata caagtgccac ttcacgga ttggcagaat ggctgtgtaa gtaattcttg 180
 tgagagagga aaaaaatgaa gattttaata atactactgt caaggcagt aatggtcctt 240
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 catggctgtc agcttcgtca cgattgtatt tattatcata aaaacacatg attcattgta 360
 caagaagagt catgatagac cttcttcacg cagcgtctgg ctgattagaa tttatccaag 420
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<210> 5243
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E11

<400> 5243

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 gcatgctgga tcttcggcca tatgctgtaa atcgcttggt aatttttggt ctactagtac 180
 acgaagaaat caaggaaaaa aaaccttgac tacgggaaga aaatcacggc cacaggggta 240

ttttaacctc cttcctaatacg cgcataatc tatcgaagtt gagtaaaactt tgatataaatg 300
tattcatggg tcacgtccaa ccaaccctgt gattggttgc ttgtaaattt ttgtggcctt 360
aatcatggct tcaatg 376

<210> 5244
<211> 179
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E12

<400> 5244

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aaccttttcc tttagctgag aagatgaact gctacagcac tgcagtgtag tggttcagct 120
agttatccaa tggatttgtgt gctgtaacct gtaacatttg tttgaaattg accttatgg 179

<210> 5245
<211> 454
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E4

<400> 5245

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gaaggcagcc gtggccgctc tgctggtgtt cgccgcggtg tcgcctgccg cgcgcgcggt 120
ggcggcggag gcggaggcga aggcgaaggc tgtgggaagc gcgccgtcgg tgcccgtctg 180
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caagggcaac tacctgacgg gcgcgctgga cctggtgggc ccctgcaagt cctccatcat 360
catccgcctc gacggcaacc tgctcggcac cggcgacctc aacgcgtaca agaggaactg 420
gatcgagatt cagaacgtcg acaacctgtc catc 454

<210> 5246
<211> 77
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E5

<400> 5246

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ttttagtctt cgtcttg 77

<210> 5247

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E7

<400> 5247

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gcgggcagcg gcggcgcacc gagcggcgcc aagctgctgc agatcctcaa cgtgcggggtc 180

gtgggcagcg gcgaccgcgt ggtggtgctg tcccacgggt tcggcacgga ccagtcggcg 240

tggagccgcg tgctccccta cctcaccgc gaccaccgcg tgggtgctcta cgacctcgtc 300

tgcgccggca gcgtcaaccc ggagcattc gatttcgcc gctacgacac gctagactcg 360

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<210> 5248

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E8

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ggaagcgaac acttttgtcg gtgccatctt agtgataccg tgggtgctgga gtttaatcag 180

tacacgccgg gctcaagggtg gaggcaagcg ttggtgaaac ggaaggagca tacggaggag 240

ggcaacgagg gcgacgggtt ctacggcggc ataaggaagc tccgcggcaa cgatgacatc 300

tccaagtgga ggcagctgtg gccaacagac gtcttgaggt aagcaggaac cgcattccctt 360

ctcacaccga cattgatcca tcgctcaaatt gacacgcctt tctttcatca tcatattgac 420
 caaattcgtc gtctctgtcg cgctgttgt 449

<210> 5249
 <211> 368
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E9

<400> 5249

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 tcctcgttct gctgcttctc atcaacacag gctttgtcct gcccgccat tccgaggact 180
 gctgggccga caccgcgctc atctgcacca agacgcacaa ctgccgggac gacacttgcg 240
 cggggcgcgg catgccggac ggccgctgcc actgggagtt cccaacctg gtgcccttct 300
 gccagtgcct gcgccccaac tgccactagt ccgggcgcct cggattggct cacttcgccg 360
 gcgatgat 368

<210> 5250
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F10

<400> 5250

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 gacaaagcag catgacggat gtcaaattaa ggagctctga aagtacaagc aacttgccaa 180
 agcttagaag aaatgcatct agttcctctg atatgagtag catggcttca caaggctctt 240
 caactaatac agctcctctt agacgcacaa gcagttggac ttttgatgac aaaattttag 300
 tacaagcgtt atacaagggt cttctttcag tatcaaagaa ctaccctatt gtactctata 360
 taagagatat cgagaagttc cttcacaagt ccccaaaaat gtatctcctg tttgaaaaac 420
 tattaacaa acttgaatgg acggtgttag tccttgga 458

<210> 5251
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F11

<400> 5251

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gagagagaga gagacgcagg accgccggcg acgatcgagg agggaggaac cagatacccg 120
gcggcggcga tcgatggctc cgcgcagctc atcggcgggc acgtgcctgt gcctcgctct 180
cgccgcggcc acgctggcgc tggcccacgg ggcgcaagga ggaggaccat cggcatcggc 240
ggcggacctg gacaaggta cggccgagac cttcttgac atcgagatcg acggcaagcc 300
tgcaggccgg atcgtgctgg gactgtttgg ggacaccgtt cctaaaacag cagagaactt 360
ccgagcactt tgcacagggg agaaaggaat tgccaagtcc ggcaagcctc tgtggtacaa 420
ggggtcgacc 430

<210> 5252
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F2

<400> 5252

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attcgcgcga ttctgacctt ggtcaatgtc tatcatgcct cacaagtcga accatcagga 120
ctgggagatg atgttagtgc tggcgaagct gtctgacaaa gagcgcttca tgggtgtcaga 180
ccacgaccgg ctggcgaagc tgaacgggtc gaagcaacgg aggatggggc agctcgcgat 240
cgactccgac atcttcaacg tgaaaccgat ctttcacgtc gtcgacgtga cgaagtccgc 300
aggcgagacg ctggcgtatg acatgttctg catcagcggc ctaagaattt cactcagcga 360
catcggcatg ggcacccgat gtgacgtcaa catggatccc t 401

<210> 5253
<211> 472

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-004-Q1-E1-F6

<400> 5253

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agagccttgg catacattca caacagcatt ggagtgtgcc acagggacat taagcctcaa  120
aatctcctgg ttaatcctca taccatcag ctaaaactgt gtgactttgg cagcgcgaaa  180
gttctggtaa aaggcgaacc aaacatttct tacatctgtt ctagatacta cagagctcca  240
gagctcatat ttggtgctac tgaatacaca acagccattg atgtttggtc tgctggctgt  300
gtgctcgctg agctgcttct aggacagcct ctgttccttg gagaaagcgg tgttgatcag  360
cttggtgaaa tcatcaaggt tctgggcaca cccacacgtg aagaaattaa gtgcatgaat  420
ccaaattata ccgagtttaa attcccgcac atcaaagctc acccgtggca ta          472

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<210> 5254
 <211> 443
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-F7

<400> 5254

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tgacgacctt ggcaagcgct gcgccaagta ctacgaggca ggtgcccgtt ttgccaagtg  120
gcgcgctggt ctcaagattg gccctaata gccatcacag cttgccatcg acctgaacgc  180
tcaggggtcta gctcgctacg ccatcatctg ccaggagaat ggtctggtgc caattgttga  240
gcctgagatc cttgttgatg gccctcatga cattgatcgc tgtgcttacg tctactgagac  300
cgtccttgct gcctgctaca aggcgctcaa cgagcaccat gtcctcctgg aggggtaccct  360
cctgaagccc aacatggtga ctccaggctc cgactccaag aaggtgaccc ctgaggtgat  420
tgctgagtac accgtccgta ccc                                     443

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<210> 5255
 <211> 458
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F8

<400> 5255

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agccaatggt aactcctgga atcgatcatg gtgctttctc gtcacatcgt gtctttcttcg 120

tcccgatcgg cctcgcttcg ctatccgcgt ctcataacat cgttgaggtg atagatcgat 180

atgacgccga gtgtgtgtcc gccaacgaca aggtcggctt catccaggac accaagaccg 240

acaaggcgtg cacaagaaag atcacctgac caaagccgat gaaagggccg atacacatat 300

actaccagct cgagaatttc tatcagaacc atcgacgcta tgtgaagagc cgtaacgaca 360

tgcagctgag gaacaagggc gacgcaagca cgatcgcgaa ctgagagccc gagggcacca 420

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<210> 5256

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F9

<400> 5256

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aaccgcgagt tgctggcctt ctgctcttgg tccacctcga acaggcttga caggctgaac 120

cctctggagt gggagatgat gtcaaagctg gagcagatcg ctgagacaga gcgcttcatg 180

gtgaaaaaac aggacgggct ggtgaagctg caggggtcca agcaaggag gaaggggcag 240

ctcgcgatcg acgccgagat cttcagagtg acaccggcct ttcacgtcgt cgaggtgaag 300

aagtcggcag gcgacacgct ggagtatgag atgttctgca gcaagggcct aagaccttca 360

ctcagcgaca tctgctggag cagccgatct gaggagaaca tggctccttc agtgggttcag 420

ccatc 425

<210> 5257

<211> 451

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-G1

<400> 5257

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agggaggcca agagccgggt ggacgagttc gcggcgagga accacgaggg ccggccgatt 180
gagtccatcc tcggcgcttg cagcaacggg tacggcaacg ttgtgcagac gctcgaagag 240
gcgcggaaga tcgtcgccac gcggggcgcg gcgggcaccc aggcccaggc cgacgacatg 300
aacacgaagc tgtcggccgc cgtcacgagc gccagcgact gccacaacgc cttcgccgac 360
ttcccggcga ttaggtcccc cttcttgenc atgcagcgga acgtctaccg cctcgtcgac 420
aacgttctca acatcttcgt cgtcgtcaac c 451

<210> 5258
<211> 450
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G10

<400> 5258

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accccgccgc cgccgcccgc ctcccggaca tcgacacctt ccgcggcaag ctcgagcggc 120
tgcttcctcc cgacgaccac gaccccggtt ggtcgcgccg cttcgacgcc gagctcggcc 180
ccgtgcacag gtacttcggc ccggacgcgc cgctggacgt gcggcagcgg atcgcgatcc 240
tgttcgcgat cctcgaccgg tcgtccaggg gcgtcggcgt cggcgtcggc gtcggcgagc 300
tggaggcctg gctgcgctgg caggccgccg cccggctgga cgctgtcacg cggagggaga 360
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ggatcaacat gggacatgac aaaatggggt 450

<210> 5259
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G11

<400> 5259

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ccgcccgaac cgccacatca gccatgggcg cctgcgcaac caagcccaag acgcttgagg 120
ggcaggcccc agctgaggcc gccgtctcca caccaaggt tgcgcccagag gccactccaa 180
tctccgttga ggttgcggt gatgaacagg tagctgagaa ggtggtggtg gaggagccgg 240
ctgcggcggc cgacgttgag catcagaagg ctaatgaggt gctcgtcca gaggcgggcg 300
tcgccgagcc cgaccacaag gaggaggaag ccgtggagaa gaccgtcgtc gaggaggaga 360
agccagcggc agcagcccat gcagaggaaa aggtcgccac cgccgccgag aacacgacga 420

<210> 5260

<211> 459

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G3

<400> 5260

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ataatgaaga gccgcagcat ggcatcatcg gccgcgctct tgggtgctagc cctcgcgcta 120
gtggcgggcca ccgccccaca ggtagcggag gcaaagaaga agagagcggc ggagagcggc 180
gaggcgggcg aggcaagaa gatccaggac gacttctgct cgacgctgtg cgagggcaag 240
aaggggacgg acctggctgt gtgcaaggag tctgcgcgc tctcccagca gtccaacctg 300
gtgctgtacg gcaggatcca gtgcaagggc aagtgcaccg agcagaaggc catcacggcg 360
ccggccatga aggtctgcca ggaggagtgc gacaaggcgt acgtggtgaa ggcggccgag 420
gtcaccaagg cctgcagcgt cacctgcgcc aaggagaaa 459

<210> 5261

<211> 471

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G4

<400> 5261

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gctgaccctg aaatcaagga ggaggtggtc gacagctccc ttgaattcct catccttgct 120
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 caggaccccc aggaagcagc aaacaagctt ctggaagaag cgtcccgaag gggaagctct 240
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 gcagacaaag agaccaccaa tgaccaaacc tcctaattac ctctgtagg gatccctcat 360
 gcgtgtgttt tcttctggct gttgtatctg atgctcaaag tagatgtcc gtgtgtcttc 420
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<210> 5262

<211> 472

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G5

<400> 5262

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 tccaggacga cttctgctcg acgctgtgcg agggcaagaa ggggacggac ctggctcgtgt 180
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 gcaagggcaa gtgcaccgag cagaagggca tcacggcgcc ggccatgaag gtctgccagg 300
 aggagtgcga caaggcgtac gtggtgaagg cggccgaggt caccaaggcc tgcagcgtca 360
 cctgcgccaa ggagaagaac ccgcgcctca gcgagaactg caagaggtcc tgcaccctc 420
 ctctttcttg aagcgaagcc ccttgaaatg aatgaaccat gcatgcatgc at 472

<210> 5263

<211> 462

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G6

<400> 5263

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gggccccgcg gggggcggtgc tgatcccca gggcggttg gagctgggcc gctggtgcta 180
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 ggccatcgcg cgctgcccc acccctggat gcgcgaggcg ctgcagcggg tctccgacac 360
 cgtcgcggtc gcggcgagaga cgatgcacct cgctccgcc ctctagctct agggccggcc 420
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<210> 5264

<211> 468

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G7

<400> 5264

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 gatgcaccgc gacgtgaagg cggagaacat gctgctggac cggaagcgga cgctgaagat 180
 cgccgacttc ggcgtggcgc gcgtggaggc gcagagctgc gagggtgacgg ggcagacggg 240
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 cgtgtacagc ttcggcaccc tgctctggga gacctactgc tgcgccatgg cctaccccaa 360
 ctacagcctc gccgacatct cctaccacgt cgtcaagctg ggcatccggc cggacatcgc 420
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<210> 5265

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G8

<400> 5265

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 tgaaggggag caagcgcgctc aagtggacgg agatgaagcg caactggggg caagtgtggc 180

agaccgggga ggacctcacc tgcgagtcgc tgacgttccg ggtgatgacc agcgaccacc 240
gcaaggccac ctcatggcac gttctccccg ctgactggaa gttcggcgtc acgtaccagg 300
catccaagaa cttctaagtc ctccaagcaa atacaccttc ggagtatga tatgcgaact 360
gacacagcat ga 372

<210> 5266
<211> 420
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-004-Q1-E1-G9
<400> 5266

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cctctgccat ctgccacca ccgcctccgc gcaccagaac gacatccacg tcctcggcag 180
cgtcgaccgc tccagcgacg gcagcagccc cgagtcggaa agccgcgtcg tctacgcggc 240
catgaagctg gctgatacgg aatccgatgc gccggcgccg gcgccggcac cggggccgctc 300
gtctggttga tctgagaagc gtgctgttag ccaagcaagg tggtaaaaac cgagaactaa 360
ttaaaggctc gattgtgtgt ccggctacta ctgttcttgc cataattata tagagatacg 420

<210> 5267
<211> 443
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-H1
<400> 5267

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ggctcgtgca ngtcggggag cgggaccagg gcccgctgtc gacggggcac cagcacctgc 180
accaccatca ccaccagctg cggcggtcgg cggcgttccc accccgccgc cgggggccgg 240
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gcgaggtggc cggcggcacc gcggcgggct ggcgcgctgt gtgctgctgc ttcccctgcg 360
 tcatggtgga ggtcgcggtg ctgccacgg tgcgcgcgcc cgcggcgctg tgccgcaagg 420
 ccgcccgcgt gcgcaagggc cgc 443

<210> 5268
 <211> 458
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-H11
 <400> 5268

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 tcgtgttcgc gcgcgacatg gtgatcgagc tgcggcagga gctgatcgtg aaccacaaca 180
 agacgatcga cgggcggggc gcgcaggtgc acatcatgtt cgcgacagatc acgctgcaga 240
 acgtgcagaa cgtgatcctg cacaacctgc acatccacga ctccaaggcg cactcggggc 300
 gcatgatccg cgactcgaag cggcactacg ggctgcgcac gcggagcgac ggcgacggcg 360
 tctccgtgct gtcgtccagc aacgtgtgga tcgaccacgt gtccatgtcc agctgctccg 420
 acgggctgat cgacgtggtg aacgggtcga cgggcac 458

<210> 5269
 <211> 445
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-004-Q1-E1-H3
 <400> 5269

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 cgattccggc gacgaccttc gccgtcatct tatccgtcct cttctgtgcc gcggctggca 180
 ccgccgtcga caacgacctc cccgactacg tcatccaggc ccgcgtctat tgcgacacct 240
 gccgcgccgg gttcgtgacc aatgtcaccg agtacatcgc gggcgccaag gtgaggctgg 300
 agtgcaagca cttcggcacc ggcaagctcg agcgtccat cgacggngtg accgacggga 360

acggcacgta cacgatcgag ctcaaggaca gccacgagga ggacatctgc gaggtggtct 420
tggtggagag cccgcgcaag gactg 445

<210> 5270
<211> 449
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H4

<400> 5270

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gttccatgac ttcgtgtctc ccttgctgac tagcagcgat ttcgatgcga agccaatggt 180
catgctgttg ggtcaatact ccacggggaa aacaacattt ataaagcatt tactaaaaac 240
aagttatcca ggcgctcata ttgggccaga gcctacaacg gacaggtttg ttgtcatcac 300
ttctggacca gacgaaagat gcattcctgg aaacaccatc gccgtccaag ctgacatgcc 360
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gccacatcca ctgttagagc acgtgacct 449

<210> 5271
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H5

<400> 5271

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cgcggcggtc ggcggcgat ctggacgcgc actacgcggc gaacaacatc gtgttggcct 180
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ggaggacgcc gtcgaacgag atggacgatg agctgtacga catcacggc tgcgacagcc 300
acgtcgcagc gagcttgcg tgccccagcc aatccggggc catggcggtc tggctcgtcgt 360
ccaagaagtc gtacgatatc tgtaccagcg ccggcgggacc agtaaccatg ccggcccatg 420

acacatacca cctcgccggg gc

442

<210> 5272

<211> 467

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H6

<400> 5272

ttcccgggcc gacccacgcg tccacgccac tccatcagcg tcctcgccga ctgcgagacc 60
gtcgtcttcg gcacccagca cgtgaacgcg cagcacaacc agcggacgtt ccacttcgcg 120
gacgagacgg cgcagaacaa cgtgtgggag atgttcgacg gggagaatgt gcccaagtac 180
aagcaggcca agatcaggct ggcgaaggcc ggcgacctct acaacctcac caaggacaag 240
accgactacg tctggtacac ctccagcttc aagttggagg cggacgacat gccgatccgc 300
agcgacatca agacagtgtc cgaggtcaac agccatgggc atgccagcgt ggcgtttgtc 360
aacaacaaat tcgtaggatg tgggcacggg accaagatga acaaggcgtt cagctcgcag 420
aagcccatgg acctgaagaa gggcgtgaac cagctcgccg tcttggc 467

<210> 5273

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H7

<400> 5273

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ttcttaggcc gccctctaca cttctcgaca taaccatcga gagggcggtc gagagaaacg 120
agagcggcag acaccatggg gagctcgagg accatcgttg cgtccccctt gctcctctc 180
gccctcctcc tcttggtttt cgcggccacc gccgaggccc gcgttggtccc cgagctgttt 240
ggcgaggacc aattccagcg gacatgcaac caggtgcact tcaggaagat gtgccagagc 300
ttgacgaggc tcccagggtt gaccacgccg cgcgagctgc tgctggcgtc gatgcgcgtc 360
gcggcggaga aggccaggga ggccaagagc cgggtggacg agttcgcggc gaggaaccac 420
gagggccggc cgatggagtc catctc 447

<210> 5274
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-004-Q1-E1-H9

 <400> 5274

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 tcctcctggt cctcttctgc atcgtgcatg gtgagaagga agagtcaaag ggcacatgatg 120
 cgaaagcgtc cgggcctggt gggtccttcg acatcaccaa gttgggcgcc tccggcaatg 180
 gcaagacaga cagcacgaag gctgtgcagg aggcattggc atcggcgtgc ggcggcactg 240
 ggaagcagac aatcctcata cccaaggggtg acttccttgt cggacaactc aacttcacag 300
 gcccttgcaa gggcgacgtg accatccagg tggatggcaa tctgctggcg accacggacc 360
 taagccagta caaggacat ggtaattgga tcgagattct acgtgtggat aacctggtca 420
 tcaccggc 428

<210> 5275
 <211> 220
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-A2

 <400> 5275

 gtacggtcta gaattcacgg gtcgaccac gcgtccaata aaaaggcatg ctggcagtta 60
 ctactatcca ttcaatgat gaaaaacaca catttgctg acattacatt tggagttcca 120
 tcgacggtat atttgaaaaa aaaacaatta gcttataaaa tgtgtgtttt tcatcgattg 180
 aatggataat aataaaaagg catgctggca gttactacta 220

<210> 5276
 <211> 230
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-005-Q1-E1-A3

 <400> 5276

gaggccgcgt caaacgtcaa cgcattgctgg cagttactac tatccattca atcgatgaaa 60
aacacacatt tgcgtgacat tacatttggga gttccatcga cggatatattt ggaaaaaaca 120
caattagctt agaaaatgtg tgtttttcat cgattgaatg gataataata aaaaggcatg 180
ctggcagtta ctactaaaga aagaaaacaa agggcgggcg ctctagagga 230

<210> 5277
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A5

<400> 5277

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aagagccgca gcatggcatc atcggccgcg ctcttggtgc tagccctcgc gctagtggcg 120
gccaccgccc cacaggtagc ggaggcaaag aagaagagag cggcggagag cggcgaggcg 180
gcggaggcga agaagatcca ggacgacttc tgctcgacgc tgtgcgaggg caagaagggg 240
acggacctgg tcgtgtgcaa ggagtcctgc gcgtctccc agcagtccaa cctggtgctg 300
tacggcagga tccagtgcaa gggcaagtgc accgagcaga agggcatcac ggcgccggcc 360
atg 363

<210> 5278
<211> 301
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A6

<400> 5278

ggtaacggtc tagaattccc gggccgaccc acgcgtccac ggaagcatga ggccggaccca 60
tcaagtacat ggtcatccaa agcgagcccg gcaactgtcat ccgcgggaag aagggatccg 120
catgcataac tgtcacgaac acagggcaag cgatggtgga cagcatctac gacgagccca 180
tgaccccccg ccagtgaac atggatggtc gagaggctcg gcgactacct cgtaaagcaa 240
ggcctgtgaa tggcttcagt taacctcgca cgctcgctg tccatggatc gagcatccag 300
c 301

<210> 5279
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A7

<400> 5279

gggtcgaccc aagcgtccgg aagcaactga aaacagccga gcgatctcct ctccctctcc 60
ctctccgata cattctccag cgcagcgaag tagacatgtc tgaccgggca aagatgtcgt 120
ggcaggcgta cgtggacgag cacctgatgt gcgagatcga gggccaccac ctgcgggcgg 180
cggccatcgt cgggcacgac ggtgccgcct gggcgcacag cacggcggtc cccgagttca 240
agaccgagga catggccaac atcatgaagg acttcgacga gccagggcac ctgcgcgccga 300
caggcctggt cctcggacct accaagtaca tggatcatca aggcgagcct ggtgccgtca 360
tccgtggcaa taagggatca agaggcatca ccgtgaagaa cacagggcag 410

<210> 5280
<211> 223
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A8

<400> 5280

ccaaacgtcc acccagcgt cagcgcgtc accggcgccc cgcccctccc ccatgctggc 60
cgcacccgca atggggtgcg cggcgtcagc cgccaacggg gccgggcccc ggcagcgggg 120
gtgggcgcgg acgcggatgc ggtggtacat ccaggcctcc acctcgggtc tgccgccgcc 180
gccgccgccg acgcacgacg cggcggagtc gtcacccggg ggc 223

<210> 5281
<211> 250
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A9

<400> 5281

gaccacgcg tccgagctat tatgcatcgg taagctcgac cgctccatcc acggtgtgac 60

tcacgggaat ggtacgtaca cgatccatct caacgacagc cacgaggatg acatcatgcc 120
acgtggtctt tgtggggagc cctcgcaagg actgcgacca tgtgcacgca gacagggacc 180
gcacctgcgt cgtgctcacc agcaacgtcg atatcagaga caatctgcgc cccgccatac 240
cgctcagcta 250

<210> 5282
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B1

<400> 5282

cacgcgtcca tttttatttt tttttttttt tttttttttt tttttttttt gttggtagat 60
aacaacattg ttttttttat gagaaaaata aagggtgtaa ttgggagttc aaggtcacgt 120
acattagcat tctcaggagt ggggtgtgcac gcacaaatgc catttttttt ctctctgttt 180
ctttctctaa tattgatccg cttttttgtg gacatgttat ctcgttcaag atttcgtata 240
taaactaata ctttgggcgg gatatatata tctgtctcac tcatttatat catatgtatt 300
aaatatgcgt ttttgttatg caatatatat atgcagctca atgcgtgttt tc 352

<210> 5283
<211> 285
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H4

<400> 5283

gggccgaccc aagcgtccag tggccatgta gatgatgggt gcccaggcat cacattccac 60
attgctgata atcctgcatc aacagcttgg accacatgac tagctttttc gtggtgggaa 120
tgacctctac tgcttgcgat tctatgttgg ggtacctcac ttgcgtgatg gtgaaggctc 180
tgtggctctc gaagatgctc tcgtttccag cactttgcct cacggccact tgcgtgctca 240
aggcactcag tcgctctgcc tcagctgtcc agtccaccgt gatat 285

<210> 5284
<211> 455

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-H6
 <400> 5284
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 cggtgacaat ggtgaggtgg ctgccgccgc cgccgccagc ggacggcgag atacccttcg 120
 gacacgacgc cgtcgccttg tccttcttcg tggcgtgtgt ggccgccacc gtcgcgctcg 180
 cgtcgtccat gtgctcggca tgcggtcgca agccgaaggc ggccaaccgt gcagacccgg 240
 ccgcttcgga ccagtccacc gggacgggct cgggctccgt ctccggcggc ggcggaagcc 300
 aggaggctag cgccgcggag gcggaggagg aagtggtag actgtcaccg gagctggcga 360
 tgcacggcgc catcgacccg gtgacgtgc cgtcgtcgac gtcgaagcgg cgctgtcca 420
 tcagcgtgag caagaagctg agcatgaaca tcccgc 455

<210> 5285
 <211> 144
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-H9
 <400> 5285
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 tgtaactgag aaaggaaagg aaaacaaaaa tgtaactgag tggctgtacc aaattctgag 120
 tgctggattc ttgctattgt cacc 144

<210> 5286
 <211> 180
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-A1
 <400> 5286
 ccacgcgtca gggatgctct tgtcatccac gatggcactc atgcatgcgc gggcgcccat 60
 ctgcatcaag ttcatgtctc gtaccgataa tgtaaagcta catgccttct tagctacact 120
 gcctgtgaca tagctccgtg catgtatgca atgtatcata ggagggaacc cattccgtat 180

<210> 5287
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A10

<400> 5287

ccacgcgtcc gagcctgcgc aaactgtaca gccgcgtctg atgttgctct ggacatgaga 60
gcacccccctt ttcagcagct atcggcaggg cagagaagtg actcttgtga taggctgaca 120
gcagagacaa acttgtacac gagatcaacc aacggcatcg ctgccactgc agcacgagtg 180
gcagcaacta ctcacataaa tgtcggcggt gttccgtttg gcatgtcaaa catgtattag 240
ggactggatc atggacgagt catggtgaat cctctgtgcg gttgatgggt ctatgctgcc 300
ttcaagtggc gatacaccga caacttgaag cggccactca aacctttgga tggatgctgc 360
aagtttagag tgcagtagac agtggttttt ctgtgtggtc atgaagagac gaacaccgc 419

<210> 5288
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A11

<400> 5288

ccgggcccgc ccacgcgtcc agtggtcgta ccacaggtat cgtgctcgac tcgggagatg 60
gtgtcagcca cactgtcccc atctacgagg gatacgccct ccccccacgc atccttcgtc 120
tcgacctggc tggccgcgac ctcaccgact acctcatgaa gatcctgact gaacgcggct 180
actccttcac caccactgct gagcgggaaa ttgtcagga catgaaggag aagctcgct 240
acattgccct ggactacgac caggagatgg agactgcaa gaccagctct tctgttgaga 300
agagctacga gctgcctgac ggacaggtca tcaccattgg tgctgagcgc ttccgctgcc 360
ctgaggctct cttccagcca tccttcattg ggatggaagc tgctggtatc tcacgagaca 420
cctacaactc cat 433

<210> 5289
<211> 460

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-A12

 <400> 5289

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 gtcgtcctct cctgtgccgc ggctgacgac ccgaacctcc ccgactacgt catccagggc 120
 cgcgtgtact gcgacacctg ccgcgccggg ttcgtgacca acgtcaccga gtacatcgcg 180
 ggcgcccaagg tgaggctgga gtgcaagcac ttcggcaccg gcaagctcga gcgcgccatc 240
 gacgggggtca ccgacgcgac cggcacctac acgatcgagc tcaaggacag ccacgaggag 300
 gacatctgcc aggtgggtgt ggtggccagc ccgcgcaagg actgcgacga ggtccaggcg 360
 ctcagggacc gcgcggcggt cctgctcacc aggaacgttg gcatctccga cagcctgcgc 420
 cccgcccaacc cgctaggcta ctttcaagac gtgccgctcc 460

<210> 5290
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-A3

 <400> 5290

 aattccaggg tcgaccacag cgtcagttcc tctggcttcc tctgcctgcc tgagctcacc 60
 gcacctcgcc tcctcagcgc gtttcctccg ttaatccggt agaaaatggc cgatgccgag 120
 gatatccaac ccctcgtctg ccacaacggg actggcatgg tcaaagggtg gttccctggc 180
 gaacacaccc cgatggccgt tttccccaac atcgtggggc gcccgcgcca cactggtgtc 240
 atggtcggga tggggcagaa ggacgcctac gtcggtgacg aggcgcagtc caagaggggt 300
 atcctgacct tcaagtacct catcgagcac gggatcgta gcaactggga cgacatggag 360
 aagatctggc atcacacctt ctacaacgag ctccgcgtgg ctcccgaaga gca 413

<210> 5291
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-A6

<400> 5291

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ttccgcacac aacgctctcc ggggtgtttt catcctagcc gtggttaagt gcctatgcac 120
aagcaaaagg acaagagcca acaaggaaaa atccgcggca acccccgggtg gcgctgctgg 180
aggcagcggc gggacgttcg acatctccaa gtcgggcgg accagcgacg gcaagacgga 240
ctgcacaaag gcagtccagg acgccttgac gtcaacgtgc gaagcgaccg gaagcgccac 300
gggtggtgat cccaagggcg actacctggt cggccctctc aacttcactg ggccatgcaa 360
ggggagcaac atcgccatcc agctggaatg gaacctgctg gga 403

<210> 5292

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A8

<400> 5292

acggtcagga attccccggc cgaccacgc gtcaggtaa gtccggcgcc tccaaggtgg 60
ccgtcaacga cgtcgtcttc aagaacatcc acggcacctc caacacgccg gaggccatca 120
cgctcaactg cgccaacaac ctgccatgcc agggcgtgca gtcgtcaac gtcgacatca 180
agtacaatgg atcgggcaac aagacaatgg cggtcggaag aaacgcaacc ggaagttcaa 240
ccggtttgga aagggaactc cctgcatccg aaccaattta ctaacatgca taaattaaat 300
atataatcac tctcgtaac ctctctcctt ctcacgtact ctcaagttcc caacgaatat 360
ataatccgct gggttgtatt tt 382

<210> 5293

<211> 351

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-010-Q1-E1-B1

<400> 5293

gaccacgcg tccaccacg cgaccgcctc gatccgcagc gaggcccttg tgcaggcaag 60

cggcggcgctc cccgaagccc cgaggaggcg gcacttccaa ggccggcgag caagcgacgc 120
 ccgtcgacgt gcgagtagcg acggcgacgc atgaggcgcg atgttcgatc gagcgacgtc 180
 acggaacggg cgacatgcnc gcagcgatga tcgcgcgtga catcctctga tccggcgcat 240
 ttttcttttc gtttattatg ttttatgcct aacacatgta ttatttacgc taaaaactgt 300
 acgtttttat gctttaacac agagttcgta tatcagttta cggcatgcac a 351

<210> 5294
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B10

<400> 5294

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 gcgtcaccag cctgtgcacg cacaaggcca ccggggagcg cttcgcgtgc aagaccatcg 120
 ccaagcggaa gctgtccacc aaggaagacg tagaggacgt gcggcgcgag gtgcagatca 180
 tgtaccacct ggccgggagc cccaacatcg tggagctcaa gggcgccctac gaggacaagc 240
 agtcggtgca cctcgtcatg gagctctgcg ccggcgggga gctcttcgac cgcacatcg 300
 ccaagggcaa gtacacggag cgcgcgcgcg cgtccctgct ccgcaccatc gtggagatcg 360
 tgcacacctg cactccatg ggcgtcatcc accgcgacct caagcccag aacttcctcc 420
 tcctcagcaa ggacga 436

<210> 5295
 <211> 430
 <212> DNA
 <213> . Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B11

<400> 5295

ccacgcgtcc gcgttgcggt cgtccacatc cttttctctc ctctcgccg gcccaacctg 60
 attgttcttc aaccaagagg aagaaaggaa ggaagggacc ggtagcatca gccatgtcga 120
 actcggcgtc gggaaatggc gtctgtgatg aatgcaagct caagttccag gagctcaagg 180
 caaagaggag cttccgcttc atcgtgttca agatcaacga gaacgtgcag caggtggtgg 240

tggacaggct gggggggcca ggagagagct acgacgcctt cacggcctgc ttccccgcca 300
acgagtgccg ctacgccgtg ttcgattttg acttcgtcac tgacgagaac tgccagtaga 360
gcaagatcgt cattatctct tgggccccgg atacatcgac ggtgagaagc aagatgctgt 420
acgcgagctc 430

<210> 5296
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B12

<400> 5296

ccacgcgtcc acaaaatagt ggtagcgcta caagttaaag ttcttctacc ggacttatgg 60
ggccatgttt ctccatgaat ggggtttctg gatcagcaac tatgggtgcct aaagttgatg 120
ctgctacaag ttcagctata gctgcgcctt tggtagcttc agatgttaaa ccctctcagc 180
cggtcagtaa ttcagctacc aagatgatta tgtcaagcaa atccactgct aaggaattta 240
aactcaatcc ttgtgcaagg gttttctctc catcttttgc aagttctagg caagtacttg 300
cagctatggc ccctgttgac acatactaca tttcacactc tgcccctgaa gtaccaatgg 360
gcgtacctgt atatgagtca aagtctgtgc ctggcgtttc acctctaacc aacaaggttc 420
attgt 425

<210> 5297
<211> 186
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B3

<400> 5297

aacactctat agtgagtcgt attatgtgaa tccggtcac gcatgatgca ctccgaccca 60
agtggcgtgc atgttctgca acatgaccgt cgaaatggga tacggcatgg ccaattacgg 120
tgacagctac tacaccgat gcgctagatg ctggctatgc aaatgcgacg acgcgtgctc 180
cgccta 186

<210> 5298

<211> 357
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-B6

 <400> 5298

 ggtctagaat tcccgggccc acccacgcgt ccaggctcat ctcccacctc tggcgatggt 60
 cgtcgcctga tcagctccac caaccaagat gaacttggat cgttatgcca acagatgcac 120
 tacaagacgt tgtgctccac gatgacgaca ctgcctgggg tgactacgcc agagcaactc 180
 ttagatgcat ccctgcggat tacagcgggt aaggcagcga tggcggagat gaagctagac 240
 tatgcaataa aatcatgcag tgctcagggt aaccgatga tgcgctcgct aaagacatgc 300
 aaggagagct acgcgtcgct ggtatactcc atcaataaca cgcggaacac gctcaaa 357

<210> 5299
 <211> 258
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-B8

 <400> 5299

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 cccattgagg aagcttgaga accagttaac aagaattgcc aacatattct tggacaatct 120
 tgттаacaga gttttaaggt ttcccagcag aaaattttcc aatccaagaa gaaggccttg 180
 aaacaacaaa atcaaaatat taattagcaa gggttaaaga aaaaggaaca ttggcaaaag 240
 tattgagaaa gggattct 258

<210> 5300
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-B9

 <400> 5300

 ccgggccgac ccaagcgtcc acccacgcgt ccgggccctt gcaagggcga cgtgaccatc 60
 caggtggatg gcaatctgct ggcgaccacg gacctaagcc agtacaagga acatggtaat 120

tggatcgaga ttctacgcgt ggataacctg gtcacaccg gcaagggaaa ccttgacggg 180
 cagggcccag ccgtgtggag caagaactcc tgcaccaaga agtatgactg caagatcctt 240
 cccaactcgc tggatgatgga cttcgtgaac aacggggagg tgtccgggggt cacgctgctc 300
 aactccaagt tcttccacat gaacatgtac cagtgaaga acatgctgat caaggacgtg 360
 accgtgacgg cgcccgggga cagccccaac acggatggca tccacatggg cgactcatcc 420
 gggatcacca tcaccaacaa 440

<210> 5301
 <211> 221
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C1

<400> 5301

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 ctcgctcggc gtgctcctgc tgcaggtggt caccgcgcgg ccacccatgg ggctcacgca 120
 ccacgtcgag aaggccatcg acgcgggcac cttcgcgcag atgctcgaca tcaccgtcaa 180
 ggactggccc gtcgaggagg cgctcggcta cgaaaagctc g 221

<210> 5302
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C10

<400> 5302

cggctctagga ttcccgggac gaccacgcg tccaccacg cgtccgcaag cattgaagcc 60
 gtagccgccg ccgccggacg agacaggttg aggcggggcg gcaatggccg ccggggacct 120
 tgaggtgctc accgcgctcg acaccgcgaa gacgcaatgg taccattca ccgccatcgt 180
 ggtcgccggc atggggttct tcaccgacgc ctacgacctc ttctgcatct ccctcgtgac 240
 taagctcctc ggccgcatct actacaccgt ggaggggtcc gcgacgcccg gcaccctccc 300
 gccgcacgtg tccgcgtccg tcaacggcgt ggccttcgtg ggcacgctgt cagggcagct 360
 cttcttcggc tggctgggag acaagctcgg gcgcatgaag gtctatggca tgacgctcat 420

gctcatggtc ctctgttccg tgcgt

446

<210> 5303

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C11

<400> 5303

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gcgcgcggac caggtgccgt gcaacaagcg cggccgggtcc tactacacca actgcgcggc 180
gcagacggcc gccaaacct accgccggcg ctgctccgcc atcacgcgt gcgcccgcag 240
catgaactga gcgccaaggc ggcgggcggc ggtctgatct gcctgctggc tggctgggca 300
gggggcacgc agctggcctg gctcgatcg acaccatgca ttgacgtcgt cgcggccggc 360
cgccatgccg ttggacgggt gggtcggacg atgaccgagg atgaagcggc ggcgcgacga 420
tagtatatac aaacaccaat gaccaaccat actacca 457

<210> 5304

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C12

<400> 5304

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ccggcaaggc ggaggcccag ggcgagtacc aggcggagca cgcggcgagc tgcgtcaagg 180
acaccgccgg agccgcggcc gacagcgcg agctgcagca gcaccgcgcc accggcaccg 240
ttgagcaggt ggcgagacg ggccagggcg tggcggcagg cgtcaaggac acggtggcgg 300
gcgcggcggg tggcgtcacc aacacggtgg cgggcgtggc ggcgggcgtc acgaacacgg 360
tgaccggcgc ggtggcgggc gtcacgaaca cggtgaccgg cgcggcccg ggtgtcaagg 420
acaccgtgac cggcgccac tga 443

<210> 5305
 <211> 167
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-C2

 <400> 5305

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 caattcccct cctcctccca acaaggcaac aacaatctgt tccggccgcc aaacagaacc 120
 caaaaaaaaa aacacactga acccaataat ccgatcccaa gaaaact 167

<210> 5306
 <211> 195
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-C6

 <400> 5306

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 aatgtccttg gaaaccttcc gggtgaaaac cccccggta aattacggca acggcaagat 120
 caattcggat taccgctacg acacaaccga actcttcccc ccggagaatg gcggcggcgc 180
 ggtgtgtgtg gtgcc 195

<210> 5307
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-C8

 <400> 5307

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 cttcctgttc gtgaacaagt cggaggagtc acctctcaag gccatcgact tcggcctctc 120
 cgtgttcttc aagcctggag atcgggtcac cgaagtgggt ggcagcgggt gttacatggc 180
 tccagaggtt ctcaagagaa gctatgggcc agagatagac gtgtggagcg ctggtgtcat 240
 cctgcacatc cttctctgcg gggtccctcc gttttgggga ggctccgatg agaaaattgc 300

acagtcgata ctccgtgggg taattaactt acagaaggat ccatggccca aggtctccca 360
gagcgcaaag gatcttgtca cgaggatgct tgaccagat ccttgtagac ggttgacggc 420
a 421

<210> 5308
<211> 427
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-010-Q1-E1-C9
<400> 5308

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gcgtcgggaa tggccgtctg tgatgaatgc aagctcaagt tccaggagct caaggcaaag 180
aggagcttcc gcttcacgt gttcaagatc aacgagaacg tgcagcaggt ggtggtggac 240
aggctagggg agccaggcga gagctacgac gccttcacgg actgcttccc cgccaacgag 300
tgccgctacg ccgtgttcga ttttgacttc gtcactgacg agaactgcca gaagagcaag 360
atcttcttta tctcttgggc cccggataca tcgagggtga taagcaagat gctgtacgcg 420
agctcca 427

<210> 5309
<211> 371
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-010-Q1-E1-D1
<400> 5309

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tgctttgcca tgtggtgaag tttcagacag atcgattcag ctagcttctt tccatgattc 120
catccacgga gctcagctag ctcgcatgg acttcagccc tcaaagaaag agcgccgaac 180
gcaaccgcg cagcttcgaa cacgatgaca gtgatgatga catcagagct gaatccaacg 240
cctctaataa gccatctgcg cattcgcacg acagcaccaa atccaagccc aagacgagcc 300
atggcggttc aaccgaagt atctccgaac cgacagcggg caacaataat gctgacgcca 360

ccaacttgga c

371

<210> 5310
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D10

<400> 5310

cgggtcgacc caaacgtcca tccatcaacg aaacaggcac acaagaacaa atacctcgcc 60
accaacaatg gcctccaggt cctccatcct acttgcaacg gcgatgctgg ttgcgctggt 120
tgcggttggt ttgtgcacca ccccgctcac ctccaggtt ggcaagggat ccaagcctgg 180
ccacctgac ctcaccccca atgttgcaac catatctgac gtggagatca aagagcacgg 240
gggcatgac ttctccttta cgctcaagga gggcccgacc ggcacctgga cgctcgacac 300
caaggccccg ctcaagtacc ccctttgcat ccgctttgct gtcaagtccg gtggctaccg 360
catcgccgac gacgtcatcc ccgccgattt caaggccggc accacctata agaccacact 420
cag 423

<210> 5311
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D11

<400> 5311

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tgttgaggaa atctttgaat aagaatgaga gtccaaatga cataatggcc ctctgttag 120
ctgctaagat atgtagttcc aataatcttc tttcttctga ggggtgtagag tatgcaaaga 180
gagcagtcag agatgccgaa tcatcagatg ggcatttaaa gagtgtggcc ctccatgttc 240
tggggagttg cctgtccagg aagtctaagg ttgcttcac tgatcaccaa aggtctgtct 300
tgcaggctga ggctttgaag tcaactcaatg aggcaatttc tcttgaccgt cacaaccag 360
aattattatt tgaattgggg atagagtatg ctgagcagcg gaatatgcat gctgccttga 420
aatgtgc 427

<210> 5312
 <211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-D12

 <400> 5312

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 gatgcaattc atgaggcttt tcatccaaaa gatcacccaa aacccaaacc agattcaacg 120
 atggaatata ggacgacatt tataagagct aagtatgaga cacaagattt tttgaaccca 180
 tctttgcgca tatcatcaag atcatctttt acagcgacca gttctgtgaa gagtgtagat 240
 agcactttct cgaacacttc aacgaaggat atctctgaag atacaggaga acttggttga 300
 gagctgaata ttagagtcgt gataggtact aacttggtcg tttagagacat gctaacaagt 360
 gatccataag tcgttttaac actcggacgg cagacagctc aatcgacagt taataaacgt 420
 gatcgtaatc cggtacggaa tg 442

<210> 5313
 <211> 79
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-D3

 <400> 5313

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 gcttacgagc atagctgtc 79

<210> 5314
 <211> 322
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-D4

 <400> 5314

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 tgtgaattgc agaatccgc gaaccatcga gtttttgaac gcaagttgcg cccgaagcct 120

tctggcggag ggcattgtctg cctgggcctg taacctgtta atggatcgga ttctcgggtgc 180
 caattcgtga tcttgaccgg tctaagaaga tggggacttg cgtctttgtt tcattgggta 240
 ttattttctac tagtgtgtat atggtaaagt cgtgtgctgt gaacctgcta tcaaaaaaaaa 300
 aaaaaaagaa gggaaccacc cg 322

<210> 5315

<211> 285

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D5

<400> 5315

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 ggccgggtgt cgtgcctccc ttgcgcgcgc tctcacgacc cagcccgtcg tgcgtcatcg 120
 agctccggcg ggccgggcat gcacgcgtcc agctagctca cacagcgccg tcgcgaccgg 180
 ctgccggtgc tccacccggc ccgcgtccac atcacggcg gcgggcgcg gcggtgaacg 240
 gtttctctcg cgcattgagcc tgtgagggtc ggtgggttcc tgcgg 285

<210> 5316

<211> 145

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D6

<400> 5316

gggccgaccc aagcgtcagg agatcgccga ggtgtacatt gagtcgctgc caatgaaagg 60
 gaagacgagc ctaggcgacg ccatctaccg tatcatcacc gaagacacgt tcgaccccg 120
 ggagttcttg gacgggatgg acctt 145

<210> 5317

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D7

<400> 5317

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 ggcgcagagc agacgcccgt gaaccattgt agctgtccct gtcgtcgtcg tcgtcaacga 120
 acccacacaa ggaaaggatg gagaagaagc cgaccatcct catgaacagg tacgagctcg 180
 ggcgcacgct cgggcagggc accttcgcca aggtgtacca cggccggaac ctgcggtccg 240
 gcgagagcgt ggccatcaag gtcacgcaca aggagaaggt gatgcgcgtc ggcacgatcg 300
 accagatcaa gcgcgagatc tccgtcatgc gcctcgtccg ccacccaac gtcgtgcatc 360
 tgcacgaggt gatggccagc aagagcaaga tatacttcgc catggagtac gtccggggcg 420
 gcgagctctt cggccgcgt 439

<210> 5318
 <211> 223
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-D8
 <400> 5318

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 ctccgacgac gacgacgcgc cgccacagcc acatggcgga cgacgccgtc gccgccggag 120
 cggccgtttg ctgcgcattg cggggctcgc tgtcttctag caggaatcag tatcagcagc 180
 ccgacgacgc cggctggcgg agcagcagca tcgacgatca cta 223

<210> 5319
 <211> 426
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-E10
 <400> 5319

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 cccacgtact ccacgttcct gaagctcctg caggacacca aggtcgcggg cgaggcgaat 180
 cagctccggt cggcgacgct actggctcgc cccgacaaac ttgccaagcc tctggcgtcg 240
 ctgcccgcgcg ataagggtgc gccggcggtg gagaaccacg tccttctcag ttacttcgac 300

cccatcaagc tggacgagat gaagacacgc accgccatcc tccccacgct gctctccgctc 360
accgacaaga aactcggcgt cctcaactac accagggccg acgacgggca gatgtacttc 420
ggcgct 426

<210> 5320
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E11

<400> 5320

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accgccacat cagccatggg cgcctgcgca accaagccca agacgcttga ggggcaggcc 120
ccagctgagg ccgccgtctc cacacccaag gttgcgcccg aggccactcc aatctccggtt 180
gaggttgagg ctgatgaaca ggtagctgag aaggtggtgg tggaggagcc ggctgcggcg 240
gccgacgttg agcatcagaa ggctaatagag gtggctgctc cagaggcggc cgtcgccgag 300
cccgatcaca aggaggagga agccgtggag aagaccgtcg tcgaggagga gaagccagcg 360
gcagccgcca atgcagagga aaaggtcgcc accgccgccg agaccacgac gacggtggag 420
gcgaagaaga 430

<210> 5321
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E12

<400> 5321

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atcggtcgac gagggctgca cgaacgatgg ggtccgcctc cgcctcagtg acgacaacca 120
gcctgctggc gctggcgctg gcagcgctgg ctttcgtctc cagggccgcg gcgcagggca 180
acggctgttc cagcgtgatg atgaccctgg ccccgatcat ggacttcac tccagcaagg 240
cgtcggagcc ggggatctcc tgctgctcgg tgctggccgg agtcgtgcag accgaccccc 300
gctgcctctg catggtactg gacggcactg ccacgtcctt cggcatcgcc atcaaccaga 360

ccagggcgct ggagctcccc ggcgtctgca aggtcaaggc gccgccgctc agccagtgca 420
caggcgctccc tg 432

<210> 5322
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E3

<400> 5322

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aggcaggcgt cggcaccatg tcttctttca ccggcacgca agacaagtgc gcggagtgcg 120
acaagaccgt ccacttcac gacctctca cggccgacgg cgtcacctac cataagacat 180
gcttcaagtg cagccactgc aaagggatcc tctcgatgtg cagctactct tccatggacg 240
gtgtgctgta ctgcaagacc cacttcgagc agctcttcaa ggagaccggg agcttctcca 300
agaacttcac gccagggtggc aagtcttcag acaagggtga actgacaatg gccccagca 360
ggctatcatc tgcgtattct ggtactcagg ataagtgtgc agcttgccag aaaaca 416

<210> 5323
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E4

<400> 5323

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ccatgtggtc gtcgatgcgg gcacagggtg cgatgggtgt ggcgttggtg ttcttggtga 120
gaggcgcatt gtgcggctct cccaaagtcc cccaggcaa gaacatcacg gccacctatg 180
gcaaggactg gctggacgct aaagcgacat ggtatggcaa gccgacgggt gccgggtccc 240
acgataacgg tggcggctgc ggggtacaagg acgtgaacaa gcccccttc aatagcatgg 300
gcgcatgcgg caacatcccc atcttcaagg atggtcgggg ttgtgggtcc tgcttcaaaa 360

<210> 5324
<211> 58
<212> DNA

<213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-E5
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<210> 5325
 <211> 367
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-010-Q1-E1-E8

<400> 5325
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 ccacaagaac acctacgcgc ctcccttcca tccaccatct tcacgcttgg atccccctcg 180
 aggcattaga gcttgccatc taccttaggt ctacaacang cacagattac agcangccca 240
 ccatctatct aagaaatcct ccttgtgtaa caccgcgtgg aattccacag gcaaggccgc 300
 caccgcccc ctccaacctc atgcacaggc aaccgtgaag catccacaag caacagttaa 360
 acgtaat 367

<210> 5326
 <211> 457
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E9

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 agggtaaggg aggcaagaac cggaagcgtg gaaagaacga ggctgacgac gacaagcgcg 180
 agctcgtctt caaggaagac gggcaggagt atgcgcaggg gaccgcgatg ctcggcaacg 240
 ggcgggtgca ggccacctgc gtggacggca cgcgtcgcct ctgccatcgc cggggcaaga 300
 tgcacaagaa ggtgtggatc gcggccgggg acatcgtcct cgtcggcctc cgcgactacc 360

aggacgacaa ggccgacgtc atcctcaagt acatgaacga cgaggcgcg cgtctcaagg 420
cctacgggga gcttcccgaa acgctcaagc tcaacga 457

<210> 5327
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F1

<400> 5327

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tcgtcgatat tattcttgtg agttccaccc caaaacgaag caacacgcct tgcccgggtg 180
gcaccgacga aaccagcgac agcagcacag agacgaacgg cgtggtatcc tcctgtctca 240
gctgcttct agctgggggt gctctctacc gtttcgagta cgcagtcaac ccggcgctct 300
tcctcgccaa agcgcgagga gggacgtgca cgctcgctcc ctctgaccct gacgacacgg 360
tggtcgccg cgccagatac ctgctgagca acggtttcaa gtgctacaac ctgttcaaga 420
gcaactgcca agac 434

<210> 5328
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F10

<400> 5328

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tggtggacaa aggctgggt agcaactagg acagggttga gtcagtacca cttgtctcac 120
tggcctagaa tgttcgaggt gatcaggtgg aaggagacgg gctcacacag agatgggagg 180
tgctgtagaa cgtagacacg ccagagttcc tctcatcgga gtcctactt caaaagtaca 240
tggattttgc agcggacgaa tgctcgcttg gtgtagaagc catggagctc tttggaccaa 300
ggtgacaagg tgaccatctg atcgaccgga tcggccatca cacaggctgc ataggtgtat 360
tgccatatca agcctatatt attgttgtat tacattggac gcatagggaa gggaaaaatc 420

cagtggattg t

431

<210> 5329

<211> 263

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F12

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tctcaccctc agcgtcgtec tcgtcggcat cgcctccgct gtcgtgtcct tcgctgcgga 120

tgacgcaccg gcagcctcac caaagcattc ggcattccaca tgggtcaaagg catgcaccac 180

gtcgcgcgac aactccgaca atgtcaccac agggctctta gaggatggtg cagctaccct 240

gacataagat tcaactgacgg agg 263

<210> 5330

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F2

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cctgggttcg attccccctcg ggagcgaatt ttcaggcttg gttaaaaaaa tcccctccca 120

gtattatatt gagaagagac cgaaacatgg tcccggccga gaaaatcctc gaaccctagc 180

cctcaatcac tagcaggcca tcaccgcca ctctgcaacg ggccaacggc ccagccggag 240

ggtggtgtgc aagatgtaat ccgggagcgg atggggcaca acaagagatt ttttttaacc 300

aagccagaaa ttcgccccca aggggggatc gaaaccggga cctgaaggaa ctg 353

<210> 5331

<211> 191

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F4

<400> 5331

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 tgaaagtctg cgtgggccgg ggtatcaacc ttgcctaccg cgacgcaaga ggcagcgatc 180
 cgtatgtcgt c 191

<210> 5332
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F5

<400> 5332

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 cggcggcaaa aagaagcccc acgtcaacca cggcaagttt aaggcggagc cgtggacgga 180
 cgggcacgcg acgtactacg gagggcgcgga cgggctaact gacaccacgg acggcggcgc 240
 atgcggctac aacggcgatc tggggaaaca ctacggcacc ctgacggcgg acgtgggccc 300
 gtcgctgtac accaacggca cctggtgctg cgctgtctat gagctcaagg gccccacggg 360
 caccatggtg gtgacggcca acaagcaggc ccagccgccg gtgagcgggc aaaagggcc 420
 acactt 426

<210> 5333
 <211> 344
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-010-Q1-E1-F7

<400> 5333

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 tcggggacgg cgtcgacatc ctgtcgtgt cgcttgcca cgaggatgcc atcgacttct 120
 cggacgaccc cgtctcgctc gccgggtaca cggcgatcct caacggcgtg ttcactctgcg 180
 ccgcggcggg caacaccggc ccgtcncccg cgaccctcgt caacgaggcg ccgtggctgc 240

tcaccgtggg cggccaccac caccgaacag gaggttcttg gccttcgtaa agctagggga 300
 cacggtccat attgacggcg attccctcaa ggaccctaac acaa 344

<210> 5334
 <211> 127
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-F8
 <400> 5334

caagcctcta cagtgagtcg tattaatgta ctgccatctg ggcatcaaat gtcaatgtca 60
 atgatctcac catcatgatc atcatcggca cctcttcgat atcggtcgca ttgaccctgc 120
 tctgaac 127

<210> 5335
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-F9
 <400> 5335

ccaagcgctc gctgccccaa caagttgtgt actgccaacg gcgcctcaa ggtcaccgtc 60
 aaggatgtca ctttaagaa catcacggc acctcctcca ccccgaggc cgtagcctg 120
 ctctgcactg ccaaggtccc atgcaccggc gtcaccatgg atgacgtcaa cgtcgagtat 180
 agcggcacca acaacaagac catggctata tgcacgaacg ccaagggcag caccaagggt 240
 tgcctcaagg agcttgcatg cttctagacc ctccgtcgac tgacctatct ctctagttat 300
 aatTTTTctc tcgtccttgc attgccatt agatgctatc cattggtaac gcacaacagt 360
 aaaacgacag acatccgaca gct 383

<210> 5336
 <211> 345
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-G1
 <400> 5336

cgggccgacc caccggtcca aaataaggct ccgccctttt ccgacattca caggggggac 60
 aggaaatcag cggccatggc ctcgattccg gcgacgacct tcgccgtcat cttatccgtc 120
 ctcttctgtg ccgcggttgg caccgccgtc gacaacgacc tccccgacta cgtcatccag 180
 ggccgcgtct attgcgacac ctgccgcgcc gggttcgtga ccaatgtcac cgagtacatc 240
 gcgggcgcca aagtgacgct ggagtgaag cacttcggca ccgggaagct cgagcgctcc 300
 atcgacgggg tgaccgacgg gaacggcacg tacacgatcg aactc 345

<210> 5337

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G10

<400> 5337

ggtctaggac tcccgggccc acccaagcgt ccaccacgc gtccgcccac gcgtccgctc 60
 tttttcttag gccgccctct acacttctcg acataaccat cgagagggcg gtcgagagaa 120
 acgagagcgg cagacacat ggggagctcg aggaccatcg ttgcgtcccc cctgctcctc 180
 ctgccctec tctcctggc tttcgcggcc accgccgagg cccgcgttgt ccccgagctg 240
 tttggcgagg accaattcca gcggacatgc aaccaggctc acttcaggaa gatgtgccag 300
 agcttgacga ggctcccag ggtgaccacg ccgcgcgagc tgctgctggc gtcaatgccc 360
 ttcgcggcgg acaaggcaag ggaggccaca acccggttgg acaagttccc ggcaaggaac 420
 cacgagggcc ggcc 434

<210> 5338

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G11

<400> 5338

ccacgcgtcc gctaccctcg tcgtcgtctc actcaccctg ccttcacgcc tccctacca 60
 aataaggctc cgcccttttc cgacattcac aggggggaca ggaaatcagc ggccatggcc 120
 tcgattccgg cgacgacctt cgccgtcatc ttatccgtcc tcttctgtgc cgcggctggc 180

accgccgtcg acaacgacct ccccgactac gtcattccagg gccgcgtcta ttgcgacacc 240
 tgccgcgccg ggttcgtgac caatgtcacc gagtacatcg cgggcgcca ggtgaggctg 300
 gagtgaagc acttcggcac cggcaagctc gagcgtcca tcgacggggt gaccgacggg 360
 aacggcacgt acacgatcga gctcaaggac agccacgagg aggacatctg cgagggtggc 420
 ttggtgga 428

<210> 5339
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G4

<400> 5339

aattcacggg tcgaccacg cgtccggcat tctcttcct tccctgagca aagagaagta 60
 gccacaagca tgtctggcat catcgacaag atccaggaga cgctccacat cgggggagc 120
 cacaaggagg agcacgagca caagaaggc gaggagcacc acaagaaggc cgaggagcac 180
 cacaagaagg acgacgggga gcacaaggag ggcatcgtgg agaagatcaa ggacaagatc 240
 accggcgagc acggcgacaa gtccggcgac cacaaggaca aagaccatag ggagaagaaa 300
 gataagaaga agaagaagga gaagaaccac ggcgagggcc atgaccatgg tgatggtgac 360
 ggcgg 365

<210> 5340
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B7

<400> 5340

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 gtgaacaacg actacacgca ctggatcatg tacgccatcg gcggcaacat gaaccccacc 120
 atcatcagcc agggaaccg cttcatcgcc ccgacgacc ccaacgcca ggaggtgacc 180
 aagcgggagt acacgccgta caaggactac aaggagtggg tgtggaagtc gcaggcgac 240
 gtcatgatga acggcgctt cttcaacgag tccggcggcc agaacgagcg caagtacgac 300

aggttcgact tcatccccggc caagcacggc cgctacgtcg gtcagctcac gcgcttcgcc 360
 ggaccactca agtgcacgt cgccagccg tgctagtaga cagcggcccg gtcgggcaca 420
 tactcct 427

<210> 5341
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-016-Q1-E1-B8
 <400> 5341

ttcccgggcc aaccacgcg tccaccacg cgtccgattc aagcacctcc tcttcccccg 60
 ccgggcaaca actcagccgc cgcaaccgcc acatcagcca tgggcgcctg cgcaaccaag 120
 cccaagacgc ttgaggggca ggccccagct gaggccgccc tctccacacc caagggtgcg 180
 cccgaggcca ctccaatctc cgttgagggt gcggtgatg aacaggtagc tgagaagggtg 240
 gtggtggagg agccggctgc ggcggccgac gttgagcatc agaaggctaa tgagggtgctc 300
 gctccagagg cggccgtcgc cgagcccgac cacaaggagg aggaagccgt ggagaagacc 360
 gtcgtcgagg aggagaagcc agcggcagca gcccatgcag aggaaaaggt cccaccggcg 420
 gccgagaaca 430

<210> 5342
 <211> 394
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-016-Q1-E1-B9
 <400> 5342

acgcgtcgaa ttagccggca cttaggccaa gaatggcacg cctcgccggc gtggcagtgg 60
 ccctagcagc catcgccgcg gtggtcggcg ccacagagac gtactacgcg tccgtggaga 120
 accgccttcc ggcgctgggc atgaagctgg cgtgccacgc gatgggcggg ttcctgacgg 180
 agctcagcgt ggtgccgcgc ggccgtgtgc ccacggcag ggccgggcgc cgcgtcgccg 240
 agctgctggt ggagcgcggc cagcacggct gggttcgctg caactgggcg tacgcgggca 300
 actacgtggc cgggatcacg gtgctggact cgcggtggcc cgaggctggg cgggtgccagg 360

accccgccgg cgaaagcctg tgccgcgtcg tcct

394

<210> 5343
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C1

<400> 5343

gtcgacaatt cccgggtaga cccacgcgtc cgcttcggcc tccaactatc accaccggg 60
acgtcttcca tggcctcctc gtagtagaat agttctatct caccgcaaca actcctcatt 120
acatccttta tgagaggctg atcgattggg agatacgtac tcgggtggag cagagcaacg 180
agagacatgg cgacgacgac gcgtgttgcc gccgccgcca ccggcgtgct gctggtcctg 240
tcggcgttgg cgaccctggc gcggggccgag gaccggtacc tgttcttcga gtggaagggtg 300
acgtacggga ccaagtcctt gctgggcgtg cccagaagg tcctcctcat caacggcgag 360
ttccccggcc ccaggatcaa ctgctcctcc aacaacaaca tcgtcgtcaa cgt 413

<210> 5344
<211> 144
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C11

<400> 5344

cacgcgtccc acatgcatgt atacacatct tgtaacgctg aattttgatt catggcacac 60
tgtactggac gaggatcatt tttttcttgc ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa acaa 144

<210> 5345
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C12

<400> 5345

taccggtcca gaattcccggtgtcaaccac gcgtccagct tgcataatgtg gctcttgaat 60

acgaccagga gctcgagaat gccaaagagca gctcatctgt ggagaagagc tacgagctgc 120
ctgatggcca ggtgatcacc attggggcag agagggttcag atgccctgag gtcctcttcc 180
agccttcctt cattggtatg gaagctcctg gcatccatga gaccacctac aactccatca 240
tgaagtgcga tgtcgacatc aggaaggact tgtatggtaa cattgtgctc agtgggtggca 300
cgaccatgtt ccctggtatt gcggaaccgta tgagcaagga gatcactgcc cttgcgccga 360
gcagcatgaa aatcaagggtg gtggcaccgc ctgagaggaa atacagtgtc tggataggag 420
gatccatcct tgcctccctg agcaccttcc aa 452

<210> 5346

<211> 327

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C5

<400> 5346

acgcgtccag cgccactcct tgtaccaggc cctgtacgcc cgcagcgtgg cggacgcccg 60
catccgcccc gcgctccgcc tgetgaagca gaatctgtcg ttcttggtgt ccgtgctcgc 120
ggaccgcgcg catcccgtgg cgggtgcggga ggtgatgcgc gcctccttcg aggcgcttct 180
gatggtgctc ctgtcgggcg gcaacgatcg gagcttcgtg cgcgccgacc acgccacggt 240
ggatgaggac ttctggagcc tgaggcgcgc cttctccaca tgtggcgaat ggctggtccc 300
caaagacgta gtggcatcgg aggcaaa 327

<210> 5347

<211> 438

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-C7

<400> 5347

attcccgtt caaccacgc gtccatgata aaccgagtgg aatacatgca ttccaaggga 60
tttattcatc gtgacatcaa gccagacaac ttcttatgg gcttaggtcg gaaagctaata 120
caggtctata tcattgatta tggacttgct aagaaatata aggaccttca tactcataaa 180
cacatcccgt acaggagagaa caaaaatctg actggaacag cacgttatgc tagtgtgaat 240

actcatcttg gaatagaaca aagtaggaga gatgatctgg agtctgctgg ctatcttctg 300
ctatatTTTT taagacgaag cctcccatgg cacggtctta aagctggcac taagaaacag 360
.aagtatgaca atattagtga aaagaaaatg cttacgtcag cagaggttct ttgcanatct 420
taccgcgcgg agttcgtc 438

<210> 5348
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C8

<400> 5348

attcccgggt caaccacgc gtccagcacc accacctcca tccgtgcgcc tctcgctctc 60
gctggtggtg ctctctctcc tccacctgct cccggggcgg gcggcctcct tttccacctc 120
ctgctggtgc cagggccggg agggcgctgc ggaggtggcg cgcattggggc tcgccgggga 180
cgggtcggcg gacaccgccc acctcagtaa taatgaaaat gggcggttca tttatggagt 240
tgcgagttct cctggtaaca gagcatcgat ggaggacttc tatgaggcac gaatagacga 300
cgttgatgga gagaaaattg gaatgttcgg tgtatatgat ggtcatggag gagtccgagc 360
agctgagtat gttaagcagc accttttcag caatttaatc aaacacccaa agttcatcac 420
tgataccaat gctgctatc 439

<210> 5349
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C9

<400> 5349

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gaagatcata cagcaggacg cgttgccggg cgttgctgcy gagaaggaga ctgccgccgc 120
cgccgcaacc tcgaaggagg aggaggaggt ggagtcgccc aagaaaggag cggctctgtc 180
gccggtgccg gaggctatcg tcatcgccac agccgcaacc tcgaaggagg aggaggagga 240
ggtggagtcg cccaagaaag aagcggctct gtcgccggcg ccggagccta tcgtcatcgc 300

cgccgcctta acctcgaagg acgaggagga ggtggaatcg cccaagaaag aagcggctct 360
gtcgccggcg cgggcgccgg aggccatcgt tgccgt 396

<210> 5350
<211> 399
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-016-Q1-E1-D1

<400> 5350

attcccgggt caaccacgc gtccatgaac atgtacaagt gcaaggacat gctgatcaag 60
gacgtgaccg tgacggcgcc cggggacagc cccaacacgg atggcatcca catgggcgac 120
tcacccggga tcacgatcac caacaccgtc attggcgctcg gtgacgactg catctccatc 180
ggccccggga cctccaaggt gaacatcacc ggcgtgacct gcggccctgg ccacggcatc 240
agcatcggca gcctanggcg gtacaaggac gagaaggacg tcacggacat caacgtcaag 300
gattgcactc ttaagaagac gatgttcggc gtccgcatca aggcgtacga ggacgccgcc 360
tccgtgctca ccgtctccaa gatccactac gagaatatc 399

<210> 5351
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D12

<400> 5351

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gaagggtggaa tgcgtggata ttttggtgca agttctgggt tcgtcaatag ctccaatggg 120
cggcaaatag gttcttactt taatggtagt tcaaaccgat taggtagtcc aattgggtat 180
gttggcctta acgatgattc aggatcaata ctgagttcaa tgtctagaaa tgtctgggggt 240
aatggaaatc tgaactacat aggcaaccat acaaacaatga attcttttcc tcaacctgga 300
agtgggtgggg gtatttctgg tgatgaaatt agttggggaa gccttacttc tgctcatggg 360
atgggcaaca tttcaagcct tggatcagga aaccttggcc gtggaaccgg agataacaac 420

tttggcttgc cttctggaaa ctatgtt

447

<210> 5352

<211> 452

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-D2

<400> 5352

ggtcgacaat tcccgggtag acccacgcgt ccaaacagag cctggacaaa gagagttcaa 60
catgactgga aacttctgga gaaggatcta ccagcgtata tttttgttcg gggtgctgaa 120
gatagaatgg accttcttag ggctgcaatt attgggccca agggaaacacc ttaccatgat 180
gggcttttct tctttgatat tcacattccc tctgcttata cttgtgctcc cccgctggta 240
tattaccact ctggaggact tcggattaat ccaaacttgt ataacaatgg gaaagtgtgt 300
cttagcctgt tgggtacctg ngatggtaga gggtgtgaga agtggaaatcc agctcaatcg 360
acaatgctgc aagttcttgt ctccattcaa gctctgattt tgantgacaa gccatattac 420
aacgagccaa gatatgagtc ctatgccaac ac 452

<210> 5353

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D3

<400> 5353

attcccgggt agaccacgc ggccattttt attccactga acatctagat ctgtaattga 60
gcttgcgcg cgtgtttcatg atttcgttat aatatgtggc cgagcgagca gcaacatttg 120
agttgagaag aatacatgac acccgtgtca actaaccgca tcatttttta gttgatgggt 180
cttatgccat ggaaattcaa cggatgttac agccttttcg taatagatca tgttaaaaag 240
cacgtgactt ttatcgactt tacaccgacc caagattggc ataagcacat gccatacaag 300
aggttcgcag aagcgattat catggcctta aagaaatata agattaccta cagcaagaaa 360
tgttctggat gggaaagagg atattttaag tgaaaacata ca 402

<210> 5354
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-D5

 <400> 5354

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 tcatcgacca cgcccccttc caggctcccg tctccatggg tctcctctca aacaggattg 120
 ggagggagag cctcaaggcg ggggatcata tctactcctg gagggcggcg tgggtctacg 180
 cgcatacacg aatatatgtg ggcgatgata aggtgatcca ttccacaaga ggaagaggac 240
 aggaggtcgg aacaggaact gtcgtcgata ttattcttgt gagtctcacc ccaaaacgaa 300
 gcaacacgcc ttgcacggtg tgcaccgacg aaaccagcga cagcagcaca gagacgaacg 360
 gcgtggtatc ctctgtctc agctgcttcc tagctggggg tgctctctac cgtttcgagt 420
 acg 423

<210> 5355
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-D6

 <400> 5355

 attcccgggc cgacccacgc gtccagcgtc tccgatccga tccatcgtgc gagcatatcc 60
 acggcgatgg aggcgagagc ggccatgagc tggtagtgcg gctcccttct ggccgtggcc 120
 atcgcgctgt tctgtccgt gtccctcggc gtgcgcgccg ccggcgcccg cgccggcggtt 180
 gacatcaagg tgtcgtgtgc agcgacgccg gaccggacg tgtgcctgcg cgcgctccag 240
 gcggacagcg actccaagac cccgcgggac ctggcgaggc cggcgctccg cgcggcgacg 300
 accgcgggcg gcgcggcggg cgactacgcg cggcacgaga tggacgttgt gaaggacaac 360
 gacatgtggc agtgccctgaa cgagtgcgcc ggggagatcg acgaggggct ggaccacct 419

<210> 5356
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D7

<400> 5356

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cgaccgccac atctattagg tgcagccatg ggtgcctgtg caacgaagcc taagacgctt 120
gaggggaaag cccagctga ggccaccatc tccacacca aggttgcacc tgagaccact 180
accatccaca ttgaggttgc ggcaaaacat gcagtagttg agaaggtgga ggaggacaag 240
gaggaggcac taacagtggc ggcgaaacaa gagccagcag ccaccattga gcctcagcag 300
attgctagtg aggtgaccac ttcggaagtg gcggtcgtcg ttgtcgagcc tgagaacaaa 360
gaggaggagg aagttgtgga gaagaccgtc atcgagaagg agaagccatc agcagtccat 420
gcagaggaaa atattgccac caac 444

<210> 5357

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D9

<400> 5357

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gttgtccccg agctgtttgg cgaggaccaa ttccagcggg catgcaacca ggtgcacttc 120
aggaagatgt gccagagctt gacgaggctc ccgagggtga caacgccgcg cgaactgctg 180
ctagcgtcga tgcgcgtcgc ggcggagaag gccaggaggg ccaagagccg ggtggacgag 240
ttcgcggcga ggaaccacga gggccggccg atggagtcca tcctcggagc ctgcagcaac 300
gggtacgaca acgttgtgca gacgctcgag gaggcgcgga agatcgtcgc cacgcggccg 360
gcggcgggca cccaggccca ggccgacgac atgaac 396

<210> 5358

<211> 395

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-E1

<400> 5358

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caccgcacct	cgectcctca	ccgcgtttcc	tccgttaatc	cggtagaaaa	tggccgatgc	120
cgaggatatac	cagccctctg	tctgcgacaa	cggaactggc	atggtcaagg	ctggggttcgc	180
tggcgacgac	gccccgaggg	ccgtcttccc	cagcatcgtg	gggcgcccgc	gccacactgg	240
tgtcatggtc	gggatggggc	agaaggacgc	ctacgtcggc	gacgaagcgc	agtccaagag	300
gggtatcctg	accctcaagt	accccatcga	gcacggggatc	gtcagcaact	gggacgacat	360
ggagaagatc	tggcatcaca	ccttctacaa	cgagc			395

<400> 5359

<210> 5360

<223> Clone ID: LIB148-016-Q1-E1-E12

cgctagcagg taccgggtcaa gaattccccg gtcaaccac gcgtccgcc acgcgtccgc 60
ccacgcgtcc ggcaaccgtg tgccttttgg agacgcgatg tcgtccggca acaagatcag 120

cgtggccttg ctgagcgtgg ccctagtggg cctgctcctc tgccacctcg ccaccaccgc 180
 ctccgcccac cagaaagaca tccacgtcct cggcagcgtc gacgggtcca gcgacggcag 240
 cagccccgag tccgaaggcc gcgctcgtcta cgcgacatg aagctggctg atacggaatc 300
 cgatgcgccg ggcgcggcgc cggcgccggg gccgtcgtcc ggttgaactg agaagcgtgc 360
 gtccagccaa gcaaggtggt caaaaccgag aactaattaa gggctcgatc gtgtgtcagg 420
 ctactactgt tcttgccata attatatata gatacgcaaa g 461

<210> 5361
 <211> 459
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-016-Q1-E1-E2

<400> 5361

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 ctactgcgcc cccgagtacg ccatgaccgg caagctcacc aagatgtcgg acatctacag 120
 ctteggcgtc gtgctgctcg agctcatcac cggccgccgc gccatcgaca tggccaggcc 180
 gtccgaggag caggtcctac ttaactgggc ttcgcctctg ctgagagaca agaggagggt 240
 cgtgaagctg gccgaccgt tgctgggcaa caggtaccca gtgaaggcgc tgtaccaggc 300
 gctcgccgtc gcgtccatgt gcctgcagga ggacgtgcc agccggccgg ggatcagcga 360
 cgtcgtcgcg gcgtctcct tctcgcgcc accgcantac taccctcccg gaggcacngn 420
 agctgaacac aagagcacgc atagcgggac agacaatga 459

<210> 5362
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E5

<400> 5362

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 gccatcatgc gcctgtcgtc cctcctcctc gtcgtggccg cctctcggc ggcgcgccgc 120
 gggcagcagg tgccgccggt gggcggcagc gctctgaagc cggactacta cagccagtcg 180

tgcccgcgcg cggagaggat catcgcgagg gtgatgcaga cgaagcagat ggcgaacccg 240
acgacggccg cgggcatgct gcgcgtcttc ttccacgact gcttcgtcac cgggtgcgac 300
gcgtcggtgc tgatctcgtc caccagttc cagaagtcgg agcactacgc ggagattaac 360
tactcgctcc ccggggacgc cttcgacgcc gtggtgcgcg ccaagctggc cct 413

<210> 5363
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E6

<400> 5363

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ggatcccccc acaccttgag acctgcgttg tcaccaccc atcgagggtg gggccgccag 120
caggttcagc cgttctgtt cttgataaaa cgagagaagg atggcagtg ttcagggagc 180
tgtcctattc ttgtttctcc tctcgtcgc agcagagggtg ggaaccatcg atgccaaaat 240
gggagtagcc atgcccattg atgccttgat aatggagaaa gcgaaacagc aggagacgga 300
gaagaaggag gagaaaagca cggagaagga agagagtcaa tgcttatcgc cgagtctcca 360
gttcgagggc ttctgcttca acagcgacag atgcgccgag gtgtgcatga aaga 414

<210> 5364
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E9

<400> 5364

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cacaatggga aaaaaacatt ctgaagtaaa caactttttg gaccacagtt ccaccgtcca 120
gtgactactc tcttatgtac tctgatgaat gtctgactaa tgatagatgg tgcaatgctg 180
catagggcac aaatccaaga acacctcgta tacaacaacc taataacgaa tcagccaaaa 240
aaaaattaac cagaagacct tattagtcaa tcttgaggtc gttgcacgat caaagattgg 300
gcgactctct ctttgattct taactctttc ttgtagtca atcttttaggt tgcaccatcc 360

aatgaatgct gacgatgtat atgtacgtgg cggttaatgg atgcccttgg gccgtcttcg 420
catgcatggg g 431

<210> 5365
<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F1

<400> 5365

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atggcacgct ctgtcccat cgcgctctg ctctgtctc cctcctcct cctcctcgtc 120
tccactgctg ccgctgcacg gaccgtgggc gacaccgtgc aggacgcgtg cagcaagaca 180
caattcccca agatctgctg ggacagcctc accgcaaagc cagagagcca gaaggcgacc 240
ccgcgccggc tggcggagct gttcgtgaac atcgcggccg agaagggatc cgggatggcc 300
acgttcgtgc acgggaagta caacaacgcc aaggacagca ccgtgttcaa gtgctacgac 360
agctgctcgg acgacg 376

<210> 5366
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F11

<400> 5366

ccacgcgtcc gaacagacca caaaggaggg gacacacaca cacacacacc gtctccgccc 60
gcccgccgag acgcgccatg gctatggctc gctccgtcgc gcacctcttc tttcccatcc 120
tccttatctc caccgcgcc gccgtgcggg ccatcaccga cgccgccggc ggccccggat 180
acctccagga ggcgtgcaac aagacgtgtg tccccaaggt gtgcatgcac gcgctcaagg 240
acaaccaga gtgccaggcg gagacggcgg tcacgcccg cggtctggcc gagctgctcg 300
tgtacgtgtc ggccgaggtg ggcatgaccg tggccgcgtt cgcgaccac gagctcaacg 360
ccatcaagga cgacgacgtc ctgtacaagt gcatcgacac ctgctccgaa gacat 415

<210> 5367
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-F12

 <400> 5367

 ccacgcgtcc gagcctccct caccaaataa ggtcccgccc ttttccgaca ttcacagggg 60
 ggacaggaaa tcagcggcca tggcctcgat tccggcgacg accttcgccg tcatcttatc 120
 cgctctcttc tgtgccgcgg ctggcaccgc cgtcgacaac gacctccccg actacgtcat 180
 ccagggccgc gtctattgcg acacctgccg cgccgggttc gtgaccaatg tcaccgagta 240
 catcgcgggc gccaaggtga ggctggagtg caagcacttc ggcaccggca agctcgagcg 300
 ctccatcgac ggggtgaccg acgggaacgg caggtacacg atcgagctca aggacagcca 360
 cgaggaggac atctgcgagg tggctcttggg ggagagcccc cgcaaggact g 411

<210> 5368
 <211> 381
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-F3

 <400> 5368

 attcccggtt agaccacgc gtccgaccac gcgtccgggc tgctgaggca gtgggcaagc 60
 cggagtgggg caacgcgggt cggggcgact ccggcagcta caaggactgg ccggaggaca 120
 cgggcttctt ccggcgcgag ggcggtgga gcacggagta cggggagtgc ttcagagct 180
 ggtactcgca gatgtcctg gagcacggcg agcgcacccg gtcggcgcg acgggcgtgt 240
 tcacggggtc ccccggcgtg aagatctcgg tgaaggtggc cgggatccac tggcactacg 300
 gcacccggtc ccacgcggcg gagctgacgg cggggtacta caacacccgg tcgcacgacg 360
 ggtacgcgcc catcgcgcg a 381

<210> 5369
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-F5

<400> 5369

gtaccggggc acaattcccg ggccaacca cgcgtccaaa cgagaggggca ggagcagccg 60
cagtcccggc gatcccggcg ccggtcgccc tcacacctcc tcgtcactgc cttcgtttct 120
ctttccaaca atcaagatga gccgtggcgg tagcgcgggg ggtgggtcaaa gttctctggg 180
ttacctcttt ggaagcgggt agcccccaa accagcagtg gcaccaccag ctgtaagtgc 240
tccacctgct gctgcagggt ctccacctgc tgagaaacca cctgctgcaa agcctgatgg 300
caccagtcag attgctgctg gggttaccag ccaaaccaat aactatcaca gggctgacgg 360
tcagaacacc ggcaacttcc ttacggaccg ncccttcgac aagggtccacg ctgctcctgn 420
cgggtggctct tccc 434

<210> 5370

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F7

<400> 5370

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ggctggaagc ggaagcattc gatttccatc gtggggcatg gcggcggagg ggaagaggaa 120
gggctgcccc gcgctagggg ggtggctgat gctagtcggc tccctccgcc tcgcctccgt 180
ctggttcggc ttcttcgaca tctgggcgct ccgcgtcgcc gtcttctcgc agacggagat 240
gactgatgtt catggccgta catttggtgt ctggactctt ttgacctgca ccctgtgctt 300
cctttgcgca ctgaacctgg aaaataggcc tttgtacctg gccaccttcc tatcattcat 360
ctacgtcttt ggtcatttcc tcacggaata cttgatatac cacaccatgc ctgcagcaaa 420

<210> 5371

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F8

<400> 5371

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agagccttgt tctccttgggt cctcttctgc atcgtgcatg gtgagaagga agagtcaaag 120
ggcatcgatg cgaaagcgtc cgggccttgggt gggtccttcg acatcaccaa gttgggcgcc 180
tccggcaatg gcaagacaga cagcacgaag gctgtgcagg aggcattgggc atcggcggtgc 240
ggcggcactg ggaagcagac aatcctcata cccaagggcg acttccttgt cggacaactc 300
aacttcacag gcccttgcaa gggcgacgtg accatccagg tggatggcaa tctgctggcg 360
accacggacc taagccagta caaggaccat ggtaattgga tcgagattct acgcgtggat 420
aacctggtca tcaacggcaa aggaa 445

<210> 5372
<211> 401
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-016-Q1-E1-F9
<400> 5372

tccgggtcga gccacgcgtc cgatcctacc ccacccacca cccgtcgacg ccggcctctc 60
tcctcaccgg ctcgagaggt cggagcccgg cggccggagg gcgacgtcgt ccctaataaa 120
tactaataat ttatcactat acataaccaa tatataagcc atgggcaagc gcagcgtccc 180
tcggtaccct gaggacgagg acaaaggcgg ctgctgcggc tgctgtgtgt ggtgtgtgtg 240
cttctgtttg ttcatcgtgg cggcgctggc cggcacggcc gcctacttct tcttcgtgta 300
caagcccaag gcgccgtcct actccgtgag caacatgtcc gtctcgcagt tcgacttcag 360
cacctccgac ctgacgtgt acgtcaagct caacgcctcc g 401

<210> 5373
<211> 260
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-016-Q1-E1-G11
<400> 5373

ccgggtcgac ccacgcgtcc gatttaaatt ctcgacaaaa tttgtttgac cacggtgatc 60
tgtcatatat gtcgtccatt gatttgtgtt aatttgacaa aagacgttga aaagaagctg 120

cactactcta ctgtgcatca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaggaaga 180
 ggcacaagaa gaataagact ttaagtaaac gtacatgaga agtcaaagtt ctacgacatc 240
 gtcaccgaaa ttcaattcaa 260

<210> 5374
 <211> 228
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G12

<400> 5374

attcccgggt aaaccacgc gtccagaccc gttttccctc catgggggttc tgataataca 60
 acatcctggg gcttattgaa tgaatgttat ctcggttact aaatgattgc catggattat 120
 tcgtcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa ggaagaaaaa caaaaggaat aaaaacttaa aataaaca 228

<210> 5375
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G2

<400> 5375

gtcaaaaatt cccgggtaga cccacgcgtc caatccgagc taagtaatta ggtcgaaaat 60
 gacccgtgcc agcagcagta gcagcagccg gcgtgtgacg ctggtactgc tcggtctccg 120
 cctgctgctt ctggttggtg ttgctgcaggc ggtagtggag ttggtgcctg ctgatgataa 180
 tatcgccgcc gccgctgctg gcacggcggg ggacgatggc gagccgcctc agcagtgcgc 240
 gaccccggtg agcgtggagg aggcgtgccg cggcgcgtcc gagacgcacg ccggcgtggc 300
 ctacgaccac tgcattggcg cgctgggcgc cgaccgcgc agcaaggagg ccggcaacaa 360
 gaacatgcac gggctggcgg tgctggccaa caggatggcc atcgaccacg ccggcagca 419

<210> 5376
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G3

<400> 5376

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agggccgtct tccccagcat cgtggggcgc ccgcgccaca ctggtgtcat ggtcgggatg 120
gggcagaagg acgcctacgt cggtgacgag gcgcagtcca agaggggtat cctgaccctc 180
aagtacccca tcgagcacgg gatcgtcagc aactgggacg acatggagaa gatctggcat 240
cacaccttct acaacgagct ccgcgtggct cccgaggagc accccgtcct cctcaccgag 300
gcgcccctga accccaaggc taacagggag aagatgaccc agatcatgtt cgagaccttc 360
aacacccccg ctatgtacgt cgccatccag gccgtgtctt ctctgtatgc cag 413

<210> 5377

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G5

<400> 5377

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aactggaaaa ccgttgacaa atgttgtgtc agttggaata ggtggtagct ttcttgcccc 120
tctatttgtg catactgcac tccagaccga tccagaagca gcagaatgtg caaaaggccg 180
gcaactgaga ttccttgcaa atgttgatcc agttgacgtt gcacgaagca ttaaagattt 240
ggatccagaa accactctgg tgggtggtgt atcaaagaca ttcacaacag ctgaaacaat 300
gttaaattgct cgaactctta aggagtggat cgtttcttct cttggggccac aggctgttgc 360
caaacatatg attgctgtca gcactaatct taagcttggtg aaggagtttg gaattgaccc 420
aaacaatgc 429

<210> 5378

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G6

<400> 5378

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 gtgtacgcgg acttcacgc ccacgaggcc atctcgtcga gcgtggccga gttcagctgg 120
 gacctcaagt tccccgggcg gcaggtgctg ctggccgagt tcaacatgac ctcggcgggc 180
 ggcgcgcaga acttcaagtc gcaggcggac aacttcgtgt gcgcggtgct ggcggacacg 240
 gggttccacc aggtgttcat cccccgggc ggctgatcc aactccggga cggggccaac 300
 tcgcaatacg ttgacagcaa cgcgttcctg ctggtggtgt acgccggact gctgctgccg 360
 ccggggcaaa ccgtgctgtg cgggaaccaa gcgctggccc c 401

<210> 5379
 <211> 452
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-016-Q1-E1-G7

<400> 5379

attccccgggc caaccacgc gtccagcatc tccatcggcc ccgggagcaa gatgatccgc 60
 atccatggcg tcaagtgcgg cccaggccac ggcatcagcg tcggcagcct ggggcgctac 120
 aaggacgaga aggacgtgga agacgtgcag gtgacggggt gcacgatcgc cggcaccacg 180
 aacggcctgc gcatcaagtc gtacgaggac tccaagtcgt cgctcaaggc cagcaagtgc 240
 ctgtacgagg gcatcaccat ggacaatgtc tcctaccca tcatcatcga ccagaagtac 300
 tgccccaaca acatctgcgt caagtccggc gcctccaagg tggccgtcaa cgacgtcgtc 360
 ttcaagaaca tccacggcac ctccaacacg ccggaggcca tcacgtcaa ctgcgccaac 420
 aacctgccat gccanggcgt gcagctcgtc aa 452

<210> 5380
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G8

<400> 5380

gggccaaccc acgcgtccag tggacgtcag cgtgcggagc gatgggagac gcaacgatgc 60
 tcatcccaa gggcgactac ctggtgggcc ctctctactt cagtggccc tgcatggggg 120

acatcaccat ccagctcgat ggcacccctgc tgggatccaa cgacctggcc aagtacacgg 180
cgagttggat ccaggtgtcg cacgttaaca acatcgatcat caacgggtcc ggcacgctcg 240
atggccaggg caccgcagta tataccaaga gcaagaccga cgtcgtcaag gcgatgcccc 300
acacactagt gttgtttctac gtgaccaacg gcaactgtttc cggaattaaa ctactcaact 360
ccaaattctt ccacatcaac atcgacactt ctaaggacat caccgtgaag gatgtgaaca 420
t 421

<210> 5381
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G9

<400> 5381

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caccaccca tcaaggttgg ggccgccagc aggttcagcc gttcctgttc ttgctaaaac 120
gagagaagga tggcagtgtc tcagggagct gtctattct tgtttctcct cgtcgcagca 180
gaggtgggaa ccatcgatgc caaatggga gtagccatgc ccatgcatgc cttgataatg 240
gagaaagcga aacagcagga gacggagaag aaggaggaga aaagcacgga gaaggaagag 300
agtcaatgct tatcgccgag tctccagttc gagggcttct gcttcaacag cgacagatgc 360
gccgatgtgt gcatgaagga gagctttccc ggtggcgagt gc 402

<210> 5382
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-H11

<400> 5382

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cgttttagaa cctggctctg agtaagtgcc atttcagctt cagctcataa cgtcagacgg 120
tacgcgacgc aacctaccca ccaatttctt cttcttcttc ttcagtgtta atttattaga 180
atcatcatgg tggaatgaac acaagaaaga acgggacgga ctagcagtaa ctaaagaagc 240

agcaggggatt gaatcgatcc ttctccttgt tcttgtttcc gtccgccggg cggtctaggc 300
ctatttacia aaatattaca gcagcagcag ccgaatagct gaccatccaa tccaattcat 360
aggtcctttg tgctggcggc gccgctgcct tcgtcgacgc cgcgcttgcc gtagcaatga 420
aagaag 426

<210> 5383
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-H12

<400> 5383

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cgacattcac aggggggaca ggaaatcagc ggccatggcc tcgattccgg cgacgacctt 120
cgccgtcatc ttatccgtcc tcttctgtgc cgcggctggc accgccgtcg acaacgacct 180
ccccgactac gtcattcagg gccgcgtcta ttgcgacacc tgccgcgccg ggttcgtgac 240
caatgtcacc gattacatcg cgggcgcca ggtgaggctg gattgcaagc atttcggcac 300
cggcaagctc gagcgtcca tcgacggggt gaccgacggg aacggcacgt acacgatcga 360
gctcaaggac agccacgagg aggacatctg cgagggtggtc ttggtggaga gcccgcgc 418

<210> 5384
<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-H2

<400> 5384

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caaggcacac gtatgtctcg cgcgctcgcg cttgcgatcc tctcctggc cgccgccgcc 120
gcggtggcgc cgctggctc cgccggcacc gangagttca ccagcgtcgg gtccagcggc 180
ggcaagatgt tcgacagggc ggtcggagcc gatcccagacc cgtccccggc cggcggactg 240
ccggccgacc cggcgccga cgcacgcccc taaggccacg cagcacccgt cgtacggccc 300

cgtttccgtg tacgcttcac gcgctggtac tctcgccgcc cgtttccgtc gccctaaga 360
 cgtagtatgt tcatgaacac gacgcgcctt gtacatgtct ctggaatgtg cagcctgcat 420
 gtgttntgct tgcgagcg 438

<210> 5385
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-016-Q1-E1-H3
 <400> 5385

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 ttcatlgatt tctgttataa ttactaccga gctactatct ccacattatt attggtaaag 120
 aaagaaaggg cgctctctct aatttgatgg gcattccgtt tccttctcaa cttcaacgcc 180
 aacaacagtt gatgctacta tgggtggaaa tcgggcatgg ttcggagggc ttttcagcgg 240
 ctcaggcaaa aggcgacaag tcagtgcaga gaagatagtg cttgatctaa cccctgtaca 300
 ggaacagaga ctgcaaagtc tgaaggaaag gctaaatgta ccttacgacg aaactcggac 360
 ggatcatcaa gattcgctta aggctctatg gaatgcctcc tttcccgata cagagctcac 420
 t 421

<210> 5386
 <211> 448
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-016-Q1-E1-H5
 <400> 5386

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 ccggcccgcc gagagctagc tgctgatcgg tcgaggagag tcatggcgac gtcgacgatg 120
 cgcgttgccg ccggcgtgct gctggtcgtg tcggcgctgg cgaccttggc ccggggccgag 180
 gacccctacc tgttcttcga gtggaaggtg acgtacggga ccaggctcct gctgggagtg 240
 ccccagaagg tcatcctcat caacggcgag ttccctggcc ccaggatcaa ctgctcctcc 300
 aacaacaaca tcgtcgtcaa cgtcttcaac cagctcgacc atccgctcct tttcacctgg 360

aacgggatgc agcacaggaa gaactcgtgg atggacggga tgccaggcac gcagtgcgcc 420
atcgcgccca acaccaactt cacgtaca 448

<210> 5387
<211> 451
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-016-Q1-E1-H8

<400> 5387

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ggcgacaaga tgccacgcgg cggcaagccc gcggcttcgt cgaagccgaa cccgttcgac 120
tcggactcgg actcggagtc cagcaataag ccggcgaaca agtccggggc gtcgtcgtac 180
caggcccccg ccgacgcca gaagcgggtac aaggacgggt tccgggactc gggcgggctg 240
gagaaccagt cgggtgcagga gctggagcac tacgcggcgt acaaggccga ggagacgacg 300
gacgcgctcg ccggctgcct gcgcacgcc gaggacatca ggaggacgc cagcgacacg 360
ctgatcacgc tgcacaagca gggggagcag atcagccgga cgcacgagaa ggccgtcgag 420
atcgnacagg acctcgcaaa gagcgagacc c 451

<210> 5388
<211> 299
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F10

<400> 5388

aattcccgcg tcgaccacg cgtacggcta gttcaccac tggatttcaa gtcctgcgg 60
gcagccatat ccagagtcag ctgacatggt caaccggttg tgaaaagcgc acaacctccg 120
gcaccagttt ccttttcgtt tcccctttt tgacataaa attgacaagt cgctgaaatt 180
gccagttttc cctcttgga ttatgtcgga taaaatgcgt atactcttcg gttttggaga 240
tatatgtcta gactctagag cgtgaggga ggttataaag tcttgtatgt ctttgttca 299

<210> 5389
<211> 336

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-F11
 <400> 5389
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 atcctctaga ctatgataac tcccctgac cttttgtcta aaaaactatc ctcaagatgc 120
 atcaaaatct tcaagctgtc cactttgatg atcttggaca tttttgctgg atggcttgaa 180
 tttgttaaaa aaatgtcatt gttaaataac ctgggtgaac tgtcagctat aatcacagcc 240
 tttcatttcc cccctttggt tgtcatgcct tgtaactact cgccgtctct tgattgttgt 300
 tgtattgtcc cattgaaagg acatgtgtat tataag 336

<210> 5390
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-F12
 <400> 5390
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 gccatcatcg agaaggcctc gtcggctctg gtcgcgctcc acattcccgg gttcacccat 120
 cggagggttac ttggcaacga cgaagaagga aacatggaga atcaacccaa agtcaaacac 180
 tcgggtagta cgttcctggg cgagctcaaa gacgacgtca cggcggccga caaccgcagg 240
 ctgctcaacg tcgacgaaga agaaaacatg gagaatgaac ccaaagtaca aactcgggt 300
 agtacgttcc tgggcgagcg cgacgacgac gtcccggcag ccgacagccg gaggtactc 360
 agcattgagg aagacacccc gcagtgggtg aacggaccag agaggccgct gctcaaaggc 420
 aact 424

<210> 5391
 <211> 324
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-F2
 <400> 5391

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aacagacgag gccaacacag ttcaaggatc cccaaagtaa cagtggcttc agcagctctg 120
gaaaccaggc acgcttcagc acaggtaaag aatcatttcg gatgcatttc ttccacgggc 180
aatctatttt tacaagtttg agcaacatct cctactacc aagtgtcacc ctcccctgag 240
cacgttttgt cccctttaa aactacgaac agaattagaa cctattctct tcttgcggt 300
ttccacggac gggcgacgaa tatg 324

<210> 5392

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F3

<400> 5392

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gatgtccttg acctccttct tggcggcctc gtcgacgtac ttctggtagt aggcgacgag 120
ccccttggcg acggcctggc ggatggcgta gatctgcgac gtcttcccgc cgcctcggac 180
gcggatcctc atgtcgatgt ccttgaacct ggagcgcccc gccagcagga tgggctcgaa 240
ggccttgagg cggagcatct cgggcctgat gagtcaatc gggacgccgt tcaccttgat 300
cagcccgcgc cccggcttgg tgtaggcgac ggccacagcc gtcttcttgc ggccgaagca 360
ctggaccgt 369

<210> 5393

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F5

<400> 5393

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aacaagattg gatatcagct gccatggagg gtgctagcta ttcagtctta gcgacgtcat 120
caagctccaa ggccacagca ccaacaaatg cattttgttg ctgctgttcg tgccttttgt 180
acacatgcta acacataatc catgtcattt gtgaagagaa gctgccatgg acagtgactt 240

catccacaat attatgtgga tggcggcagc tggagatggt aggccccgat cgaatggtga 300
tcagcagatg agacttgctt gggcttttct ggcactcgta gttctttgct gtctgtaaca 360
tctttctcaa tgtacgttat catgtgcatg tgcaac 396

<210> 5394

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F6

<400> 5394

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gccacatcta ttaggtgcag ccatgggtgc ctgtgcaacg aagcctaaga cgcttgaggg 120
gaaagcccca gctgaggcca ccatctccac acccaaggtt gcacctgaga ccactaccat 180
ccacattgag gttgcgga aacatgcagt agttgagaag gtggaggagg acaaggagga 240
ggcactaaca gtggcggcga aacaagagcc agcagccacc attgagcctc agcagattgc 300
tagtgaggtg accacttcgg aagtggcggc cgtcgttgct gagcctgaga acaaagagga 360
ggaggaagtt gtggagaag 379

<210> 5395

<211> 72

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F7

<400> 5395

ccacgcgtcc aaaaaaaaaa acaaaaaaaaaa ataaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aa 72

<210> 5396

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F9

<400> 5396

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 ccgtgcccta cagctgggtca tgagcgcccg cccaaccatg gcggcggcgg cgcccgtgcg 120
 cgctggggtg gtggcgctgg cgctgggtgt ggcgtgcgcg ctgctccagc cgcggccgtc 180
 cgacgccgcg gcgcagcccg ccccgagtc gccggcgacg gcggtgtcgt cgggcgcgcg 240
 caagcccaag tgcgtggccg gcgccaggaa cgaccacgcg tgccgcgtcg gcgccgtgca 300
 cgacccggac agccaggagg aggagggtc cagcgtcacc atcgacgcgc ccgccgccgc 360
 gcccgcgcg gtcggccacg acgacggcag cgactacaac gaccccgacg tgccc 415

<210> 5397

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-G10

<400> 5397

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 gatggcgtag cgtgtcctgg aggtcaccct ggtgtcggca aatgacctca agaaagtgtc 180
 gctcttctcc cggactcgca tctacgccgt ggcttccatc tccggattcg acctccgcac 240
 cccttccac agcacccaag cagaccacag caacggctgc aaccctgct ggaacgccgt 300
 ggtacacttc cccatcccgg ctgccgtga caccgcggc ctgcactcc acgtgaggct 360
 ccgcgccag cgtctatacc tgggcgatcg cgacatcggc gaggtgtttg tgcccatcga 420
 cgacctctg gccggcgc 438

<210> 5398

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-G11

<400> 5398

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 ggatgccaa gtgccgtgg ggcttcttc acgttgtcaa caacgactac acgcactggc 120

tcattgtacgc cattggcggc ggcgacgcgc caaccatcat cagccagggc aaccgctaca 180
tagcaccacc aaacatcgcc gccaaagtga tcaccaagca ctacgcggaa gaaggcgtgt 240
ggaagaactg ggtgtggcac acggaggacg acctgttcat gaacggcgcc atcttcaatc 300
cgtccggcgg cgcccccaag caggctcgaca ccaacgagtg ggtaaagccc aagccaggaa 360
cctacgttac aaggctcacc cgcttctccg gcacactgtc ctgctgcacg ggcaa 415

<210> 5399
<211> 368
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-G12

<400> 5399

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cagtagcccc ccggcggagg aggggggagcg gcgggacgag agcgagagcg acggggagat 120
ggcggggctg gcggccgtgc tggacttcga catgctgtgc gcgtccgtgg cgctgtcggc 180
ggagaggagg aaggccggcg cggcgttggc gggcgcgccc ggcgactgcg gcggtggagg 240
cggaggggtg cagaggatgt gggagggcga cgtcgtgctg gattgcctac acgaccggcg 300
attcgcgtc gagacgtcct gctgcccatt ctaccggtt ggtaagaaca tcgggcgagc 360
caatctcg 368

<210> 5400
<211> 350
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-G3

<400> 5400

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ggtggaaacc tcaccgggt gcttcaacga acgcgaaggt gtcgctgtca tttagcgcgt 120
cttgattgga tttgacctgt tggcctgntg gcgtgttgc gttgattgag ctcgaggatg 180
atgaaatggg ggctcagcag cggcacgccc gcggattcct actacgaggt acggtcagat 240

tgcacggacg gtgtgcccac gagcaagttc aagatcaagg ctggcaaac attaatgtgt 300
cggaatggc aggtgcatt tagtccgat ggctgtcttg atattgcctc 350

<210> 5401
<211> 357
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-G4

<400> 5401

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ctggccaact ggtcctcacc cccaaaattg gcaacatctc cgaaattgaa attaaagagc 120
acggttgcca tgacttcccc tttgaactca aagaaggccc gggccggaac tggacgcttg 180
acacaaaggg cccactcaaa gtacccctct gcaatcgctt ttgcaacaaa tcttggcgct 240
accgcatcgc cgatgatgtc atccctgaaa attttaaggc cgacaccacc tacaagacca 300
acctcagcat ctgatcatcc tcttatgagg aataatattt tgaaagagct catctga 357

<210> 5402
<211> 375
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-021-Q1-E1-G5

<400> 5402

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actcttgctg gaactccttc tcaagcacta taccatattc cgcgtccttt cttgaaatcc 120
aaggacaacc ttttggttgt cttcgaggag gagatgggca agccggatgg catcctcgtg 180
cagacggtga cgagagacga catatgtctg ttcattctcg agcacaaccc gggacagata 240
aagacgtggg atacggatgg tgacaaaatc aaactcattg cagaggatca cagcangcgg 300
ggcaccttga tgtgcccccc tgagaagaca atccaagaag tcgtctttgc cagcttcggc 360
aaccgaagag gcatg 375

<210> 5403
<211> 453

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-021-Q1-E1-G6

 <400> 5403

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 cctccgactc agcatggtcg ccgtcgtcct ggctgccatc gccacagtag tgctcgcgga 120
 ggaagccgat ccgcggggcac tgccggcaca gtggaccacc gcgaagaagt acaaggccac 180
 gatggacgcc aagacgcggc aggttttcga cggcgtggtg gccgccgcta cggcagagaa 240
 gcggtcccag gcggtggagg ccgtgctgca gcagcagctg aacatggacg tgtccctgtc 300
 caaggcgacg tcttcggggg acgagaacaa ctacgtgagc gtggccgccg cctacgagaa 360
 ggccgcgggc gccgtcatcg cggcgacgcc ggacaacaag ctccgcgcta tggcggtcgc 420
 gttcgacggc gcggtggcgc cggacccggg ccg 453

<210> 5404
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-021-Q1-E1-G7

 <400> 5404

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 ctgaaagcac aatatgtgaa gaagggagac tacgtcactc ttgttcagag cggagtgact 120
 tcaatctgga tagaggaatc cactcaccac atccaaatga ggaaagttca ggtctgatgt 180
 gccggtggga attggtcgtc tgagaaattt tgatagcgc gccctgatgtg ttatcatcat 240
 tatatgtgta attttactgt tttaccaaga gattgcgacg tcgagttaaa tgttggtgtcg 300
 aattcacgtg tacgctctga atcttgactg tgtacgttca ttttcgcttg tttcacactg 360
 aaatgttata agctcaactt tactgctttt gtttt 395

<210> 5405
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-021-Q1-E1-G8

<400> 5405

aattcgcggg ccgacccacg cgtccacgga cgcgtgggtg ggcacctacg gctacgccgc 60

gccggagtag gtagccaccg ggcacctgac ggtgatgagc gacgtgtacg gcttcggcgt 120

ggtgctgctg gagatgctgg tgggacggcg cgcgtggag ccgagccggg cggggggccg 180

cgacggcagc ctggtggact gggcgccggc catccttacc cggcccaaaa agttggagcg 240

gacacctgac cggcggatgg gcgaggtctg ctccgagatg ggacctgacg gcgtggcccg 300

cctcgcgtac gactgcctca gccagaacct caaggtccgg cctccatgg ccagggctgt 360

caccacgtc gaggcagtc tcgcgcggg tgccggtgcc gccgacgcc cgcgcgggtg 420

agacgggagg ttgatgtagg t 441

<210> 5406

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H1

<400> 5406

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ccaagttttc ctacttctta ggacctctcg ccggcgacga gcaccaccag cttggttcac 120

tcccaacaaa atgtcagcca atgtgggtga atcaactagc ggtgtcagca gcagcgatgc 180

agctgggggg agctttgagt gcaacatatg cttcgagctg cctcaggagc caatagtgac 240

tctctgtggc cacctcttct gctggccgtg cttttaccgg tggctgcaca ttcacgcaca 300

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tgggcg 366

<210> 5407

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H10

<400> 5407

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gtcgccgtgc tagcgggtggc cgcggatgtc gccaacgccg gccacgcaa gccctgacg 120
cctggcgggc gcgtggtaca ccacaaccac ggcaagttca cggccgggcc gtggaaaccc 180
gccacgcga ccttctacgg cgggcgggac gggtcggca ccacggcggg cgcgtgcggg 240
tacaaggaca cgcgcgcga ggggtatggc gtgcagacgg tggccgtgag cacggtgctg 300
ttcggcgacg gcgcggcctg cggcgggtgc tacgaggtgc gctgcgtgga cagccccagc 360
gggtgcaagc ccagcgcggc ggcgctggtg gtgacggcga ccgacctgtg cccgccc 417

<210> 5408

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H11

<400> 5408

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tatccggcca gcccaacgaa aatgtcgcgc gccacagctg cggtcctctt ctacatcctc 120
gccgtcgtg ccctcagcgc ggccgaggca ccggcagagt caccgaaggc aggcagtcct 180
gccaaggcac cggccgagtc accgaaggca ggcagtcctg cagctcctgc caaggcaccc 240
gagtctgctg ccacgagaac tgcccccgct aaggcacctc aagccgcctc ccccccgcc 300
gctgccgtg ccccatcgtc gtcgtcgtct aggaagtctg gtccagctgc cgcgccgacc 360
accgccgcct ctacaccgtc ttcttccacg gacgaagagt tgagcccttc gccg 414

<210> 5409

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H12

<400> 5409

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ggttggtgcy ctgagagggg agctcgcagc aaccgctgtg aatgcgcca tgggtcccagc 120
tgagatcctg tcagagctgg ctccatatgt ttctctggcc gagaagctcg ggaggctggc 180
ggtgcagctc gtggccggcg agagcggcat caaggcgtg aagggtggtg acaccacagc 240

gcgtggcccc gacgacctgg aactcggct cctccgcgcg atggtgacca agggcctggt 300
 ggagccggtg tccagcacgt tegtgaacct ggtgaacgcg gactacacgg ccaagcatcg 360
 cggcctccgc ctcacggagg agcgcgtggc gcacgacagc cccgcggcgg aggcgccgct 420
 ggagtccgtc 430

<210> 5410
 <211> 347
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-021-Q1-E1-H2

<400> 5410

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 aagggaccag cccccacga cgtgaaagg aaactcccca aaacgtaaaa aacaactcca 120
 actcaacaag aaaggcattg gcccccttac aaggacctta aggaaaaacg gagcgcttcc 180
 ngcngtcgcg gctagccaga cgatggccat gatcaatang ctgcangang agaaggctgc 240
 aatgcanatg gaggtctctgc agtacctgan gatgatggaa cagcaagctg accacgacca 300
 cctggcgatt caagacctgc acgatttgct tacggagagg gagaaaag 347

<210> 5411
 <211> 393
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-021-Q1-E1-H3

<400> 5411

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 tgctgcgctc ctctcgcga cgggtgttct gctggcggcg gccgggtcca ccccggcgc 180
 cacggctgct ggcattcttc aggtgcgcgc caagttcacc gccggggtgg gagggggtgc 240
 tggcgccaac atcagcgccc ttcgcgcca cgatggcacc cgtcacggcc gcctcctcgc 300
 agccgcccgc ctccctcttg gcggcctcgg gctccactg aactggcct ctattacacg 360

gagatcaagc tcgggacgcc acccaagcac tac

393

<210> 5412

<211> 256

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-H4

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catagcctgc agtccaagga gcagatggaa acggtgcaga agatgaagca agaagctgct 120

acaaggcggc aaagggcctt gtcatacgca ttctctcaac agtggangaa caagaacacc 180

tcttctgcgc gagctgcgca tgggcctgct cccatgtaca tggaacctgg caaccggaac 240

tggggctggt gctggg 256

<210> 5413

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H5

<400> 5413

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acgaccgcgt ccgtcgcttt cgcgtccaaa gcctccaccg tccacgagat ccagaacaag 120

tctggcatct tctcgttcga tctgtcgtgg agcgagatcg caaccttgaa gccagcatc 180

atctccccct tcgctcaggc aggcattgta agaaatcctg cagcgaagaa tgccggcaag 240

ctgatgactt tgcccgaatt cttagacttg gccaaaggcca gcaacatcac cggtatactg 300

atcgaaatag agcatgcttc ctacctcgcc aagagaggga tcggcgtggt ggaggcggtg 360

tccagcgcgc tg 372

<210> 5414

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H6

<400> 5414

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tttcgctccc tccctccaat tgcaggatcg gcaccgatgc gattcgaccg cggcctcgca 120
tccggtgcgg aggtctgcca ttggaggag gtcctctccc gctgcgcgcg cgcgtcgcgg 180
cctgggcgag ttacctgctg gttcctcgtc cctcgggaga gattttgcga tccttggcgt 240
tactgttcga ttgcaaacag tattgctgct tctctgagga ggcattaggg ctatgggcag 300
ttgaactgaa ccgccgcagc agaaatccat ttcgaggag agagatatca aagaggagag 360
tgagtgatca tgg 373

<210> 5415

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H9

<400> 5415

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catcggcagc tgccacacgc cgcgcgccaa ggagctggtg gagaaggcct gcctcggcaa 180
gcgcattctg acgtcgcccg tgtccgccga cgtctacggc ggcgacgcca actgccctgg 240
caccaccgcc acgtcgcccg tgcaggccaa gtgtccaag aggtcgccca gagccgcgca 300
gtaatttcgg tagtcgtcgg cttcggcctc ggcttgttac ctcccgtcat ctttcattct 360
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<210> 5416

<211> 438

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-022-Q1-E1-A10

<400> 5416

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accaagctca acaacagcca gctcgcgaaa ataatgaaga gccgcagcat ggcacatcatcg 120
 gccgcgctct tgggtgctagc cctcgcgcta gtggcggcca ccgccccaca ggtagcggag 180
 gcaaagaaga agagagcggc ggagagcggc gaggcggcgg aggcgaagaa gatccaggac 240
 gacttctgct cgacgctgtg cgagggcaag aaggggacgg acctggtcgt gtgcaaggag 300
 tcctgcgcgc tctcccagca gtccaacctg gtgctgtacg gcaggatcca gtgcaagggc 360
 aagtgcaccg agcagaaggg catcacggcg ccggccatga aggtctgcca ngaggagtgc 420
 gacaaggcgt acgtggtg 438

<210> 5417

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A12

<400> 5417

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 tgcaacatga cggatcatggg ctacgtgccg gagctgtggg ggctcaacta caaggacgat 120
 caggtgaaca ggatcatcta cccggagcat acggtgtcgt tcgcgaagct gtcaaggatc 180
 aaaaaggacg acctcatcga gacgtccatc aacgtcatcc tcaagcagcc gcccttcac 240
 gcgacggcga accggtctgt cgcgaacgtc agggctgtga gctcggcgta gaccgtggtg 300
 gtgtacgtcc atgcgacggt gacagtggca gtgaccccg cgaagaagat gttcagagtg 360
 tccaaatagg tcgggtactc 380

<210> 5418

<211> 315

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A2

<400> 5418

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 acgaaatttc aattcacggc cggtctttta aaaacttctt aacgggaaaa accttgcggt 120
 taccaaactt aaccctttg aagaaaagcc ccctttcaca accgggtgta aatccaaaaa 180

ggcccgtaga attgaccttt ccaaactttt gccaaccta aagggaagt ggaaccccc 240
 tgttatcgga gaattattca cgccggtttt ggtggttaacc cacaccttaa cggcaatatt 300
 tgcaacctcc caacc 315

<210> 5419
 <211> 420
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-022-Q1-E1-A4
 <400> 5419

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 acgtcgatcg tgtttctcag cacgggctag ctagctccct ccctcccagc catggcgacg 120
 ccggacaaca aggggcacgg gcatccgctg cccaagtttg gggagtggga cgtgaagaat 180
 ccggccacgt ccgagggctt caccgtcata ttccagaagg cccgcgacga caagaagacc 240
 accaccggcc ctggggctgg gaacgcgcgc gcaggcattc cgccggcctt caggaacggc 300
 ggcggcgacg gcgggtacag gcccgaattc ggcgacggca accagtacac gccgccccaa 360
 cggaagaagt gggccttctg tggctgctga atcgaagctc gctgtgctgc tgtgctgact 420

<210> 5420
 <211> 415
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-022-Q1-E1-A5
 <400> 5420

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 ataccatgc accacctcta gctagtttcg gtttgatttc attccatttc ttctttccat 120
 ccatccaccc aatccaatca aattagtaat gagcaaagg gctatcatcg gcgcgtcgac 180
 cgtccttgtg gtggcggtgg tcgcggccgt gtgcgtggtg tccttcaagg gcaactccgg 240
 caagggcgat ggcgacgaga acctgtccat gtcggtgaag tcggtgaagg ccttctgcc 300
 gcccgcgac tacaaggaga cgtgcgaggc ggagctgtcc aaggcggcgg gcaacgccag 360
 ctcgccgtcg gacctggcca aggtcatctt caaggtcacc accgacaaga ttcac 415

<210> 5421
 <211> 448
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-022-Q1-E1-A6

<400> 5421

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 ccacggcgat ggaggcgaga gcggccatga gctggtactg cggctccctt ctggccgtgg 120
 ccatcgcgct gttcctgtcc gtgtccctcg gcgtgcgcgc cgccggcgcc ggcgccggcg 180
 ttgacatcaa ggtgtcgtgt gcagcgacgc cggaccggga cgtgtgcctg cgcgcgctcc 240
 aggcggaacg cgactccaag accccgcggg acctggcgga ggcggcgctc cgcgcggcga 300
 cgaccgcggg cggcgcgggc ggcgactacg cgcggcacga gatggacgtg gtgaaggaca 360
 acgacatgtg gcagtgcctg aacgagtgcg ccggggagat cgangaggcg ctggaccacc 420
 tggacgacac cganggcggc ctcgacga 448

<210> 5422
 <211> 378
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-A7

<400> 5422

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 acggcaacct gctcggcacc ggcgacctca gcgcgtacca aagggaactgg atcgagatcg 120
 agaacgtcga gaacctgtcc atcaacggcc acggcaccat cgacgggcag ggagccctgg 180
 tgtggagcaa gaaccagtgc cagcattctt acaattgcaa gatcctcccg aatagcttgg 240
 tgctggattt tgtgacgaac gtccagatcc gcggcatcac gctgctcaac agcaagttct 300
 tccacctcaa catcttcgag tgcaagaacg tgctgatcga caaagtgcg gtcaaggccc 360
 ccggcgacag cccaaca 378

<210> 5423

<211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-A8

 <400> 5423

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 agccccaaca cggacggcat ccacatcggc gactccatca acgtgacgat catcagcacc 120
 accatcggcg tctgcatga ctgcacgcc atcggacccg ggagcacgat gatccgcac 180
 tatggcgctca agtgcggtc aggccacggc atcagcgta gcagcctgtg gcgctacaag 240
 gacgagaacg acgtggaaga cgtacaggtg acggggtgca cgatcacctg caccacgaac 300
 ggctgcgca tcaagtcgta cgacgactct atgtcgtcgc tcaaggccag cgagttcctg 360
 tacgacggca tcacaatgga caatgtctcc ta 392

<210> 5424
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-A9

 <400> 5424

 ccacgcgtcc aggcgacctc atcctgtcgg gcgccacgtc cgtgttcggc gccgcgccc 60
 tggagggtctc cgtgaaggtg gccggcatcc actggcacta cggcagccgg tcccacgccc 120
 cggagctcac cgcggggtac tacaacacgc ggccgcacga cgggtacctc accatcgcgc 180
 gcctcctggc gcgccacggc gccgtgctca acttcacctg cgtggagatg cgggaccacg 240
 agcagccgca ggaggcgcg tgcatgccgg aggcgctggt ccggcaggtg ggccgcgcg 300
 cgcgcgccc cgggggtgggc ctgcggggc agaacgcgct gccgcggtac gacggcacgg 360
 cgcacgacca ggtggtcacc acggccgccc agcgcgccc cgatgaacgg gatggtggcc 420
 ttcac 425

<210> 5425
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B1

<400> 5425

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cgcgccggcc gccgcaccac cgggtagccc cggccccgcg cgcgcgccgc cccagctcgt 120
ctgctgtcgc tcttcgtga tggccgacgt cgacgtggac gccaacaacg aggccgagcg 180
aaggacgcgc tcggagccgg ggacctccat gtcgccgtca tcggaggccg acgacgacac 240
ggccagcagt acaccaacg agtccccggc gcgcgccttc gcggggcaca cgctcgagga 300
gccgcctcgg cggcggggcg cgtcccggcg gtcccgtccc gttcgatgc tccagagcgt 360
gtgccggtcg ctcccgtgc tgaaccgcg gtgcggggcg ccgatgatgc aggccggggg 420
cgtgcggatc gcgccg 436

<210> 5426

<211> 248

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B10

<400> 5426

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caaaattcaa ttcacgggcg ttcttttaaa aacgtccgaa ctgaaaaaac ccgggggttaa 120
ccaaattaaa ccccatcaa aaaaaccccc ttttctcaag ctggcgtaaa acaaaaaagg 180
cccgaccaa ttacagttcc aaaaatttgc ccacccaaat tgaaaaatgg gcaccacctt 240
atcagggc 248

<210> 5427

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B12

<400> 5427

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ccctcacatc cgctcctccc tccccgacac cgaccgacct ctcgtccgct cgctccctc 120

cccgatcccc accgccatgg ccgccgccgc cgccgccgcg tcctcctctt cctcctccga 180
 ggttccgata gccgcccga cctgcgtctc cgtcggcgat gtggcgggtg gcgcgggtggc 240
 tacaggcagc ggcgaccggg tggcggcgga ttgcgggggtg tgcgccatct gcctcgacag 300
 gatagcgctc caggagacgg ccctcgtcaa aggttgcgac cagcctact gtgtgacctg 360
 tattttgagg tgggcatacct acaaggagaa ccctctctgc ccacagtga agcatcc 417

<210> 5428
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B2

<400> 5428

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 ccgcttcttc tctggctcaa tggagggcct ggctgctctt catttggaat cggagcattc 120
 catgagatag gtccgttccg tgtggacacg gatggcaaga cactctgcaa ttttaaatac 180
 gcctggaaca cagtggcgaa cgtgctgtac ctggagagcc ccgtgggcgt gggcttctcg 240
 tacgccgcca acacgggcgt gtacaagggtg atgggcgaca acatgaccgc ggacgactcg 300
 ctccagttcc tgctcaagtg gctggaccgc ttcccggagt acaagggccg cgacttcttc 360
 atcgccggcg agagctacgc cggccactac gtcccggagc tcggccgctc catcct 416

<210> 5429
 <211> 129
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B3

<400> 5429

ccgggtcgac ccacgcgtcc aggtaggcgt ggctcagttt atgtgatact gctagcgatg 60
 gatgatgatg atctgcgtgt aattgaatta aagaattgtg ctgatctttc tacaacactg 120
 ttccacatc 129

<210> 5430
 <211> 399
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B4

<400> 5430

cggggtcgacc cacgcgtccg cccacgcgtc cggccacgtg cacgccgagg aatcgctgcc 60

cgttgtggcc aaaagcggcg cggcgggtggc aaggaacgac ggcgactcgc ggctgctcgt 120

cgacctggag cccgtgccgg cgatcagatt cagcaagcgg cacggcgact acggcgcccg 180

cgaccacgcg ccgccgtacg ccaagacctt gtccagcagc ttcaaggagc cggcccgtgt 240

cgcggaccgc cgccctctct cgggccccgg gcagctcgcc gcgtccaccg gtttcgcctg 300

ggccaagaag ccccggtccg tcgccaggtc ttcgacggcg gcagccgccg tcacgaagcg 360

gagctactcc aagggttcag ggaccatgaa caacagcag 399

<210> 5431

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B5

<400> 5431

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ccagcagaaa atacataata tgcattgtact cctctttttt tccgtatagt aatataaaca 120

aattttcaca tgtgttttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

ggaaaaaaaa aaaaaagaaa gaaaaaaaaa aaaagaaaaa aaaaggacgg cggacccaaa 240

ggatcaaggc gtacgaaagc gtggaagcag catcacatgt actgaaaagt ggaacggaaa 300

attaattcac aggccgccgg taaagaactt cgtgcaggga aaag 344

<210> 5432

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B6

<400> 5432

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ggacgacgcg acggacgcgg cccggagcgc gtcggacatc gtgctgacgg agccccgggt 120
 gagcgtgacg gtgagcgccg tgctcaccag ccgcgccatc ttccagcgca tgaagaacta 180
 caccatctac gccgtgtcca tcaccatccg catcgtgctg ggcttcctgc tcgtcgcgct 240
 ggtctggaag ttcgacttcg cgccttcat ggtgctcatc attgccatcc tcaacgacgg 300
 caccatcatg accatctcca aggaccgct gaagccgctc ccgacgcccg actcgtggaa 360
 gctcaaggag atcttcggca cgggcatcgt gc 392

<210> 5433
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B7

<400> 5433

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 tctgtggctc gtgatatccg cgcaaacaat gctagttgcc gccgcggccg gcgccaagcg 120
 gcaggcgccg gtgatgttcg tgttcggcga ctcgacgctg gacgtcggga acaacaactt 180
 cctgtcgggg gcggccgtcc ccaggggcaa caagccccac tacggcgtcg acttccccgg 240
 cggccatccc accggaaggt tcagcaatgg cgacaacacg gctgacttcg tcgcgaagag 300
 catgggggtg aagagtagcc ctccgccgta tctgtcgtt gcaccaacg gtcacagccc 360
 tctgctcgcg cagactgctc tcaccactgg tgtcagctac gtttccgcag acg 413

<210> 5434
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B8

<400> 5434

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 ttctgtggct cgtgatatcc gcgcaaaca tgctagttgc cgccgcggcc ggcgccaagc 120
 ggcaggcgcc ggtgatgttc gtgttcggcg actcgacgct ggacgtcggg aacaacaact 180
 tcctgtcggg ggcggccgtc cccaggggca acaagccca ctacggcgtc gacttccccg 240

gcggccatcc caccggaagg ttcagcaatg gcgacaacac ggctgacttc gtcgcgaaga 300
 gcatgggggtt gaagagtaac cctccgccgt atctgtcgct tgcacccaac ggctccagcc 360
 ctctgtcac gcagactgct ctcaacactg gtgtcagcta cgcttccgca g 411

<210> 5435
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-022-Q1-E1-C10
 <400> 5435

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 acgtgggcac tgaactgcac aggtcacgtc ggtatatcgg tgctgtgcc cgagaagccg 180
 ccgcgaccgt ctggagtga ggcacacgtg tgggcatggc ccgtgggtgt ccgcgccggt 240
 ggggtgctgg gaaccagcgc cttgacgctc tctgtaggcg gcgcggtgag ctggaccagg 300
 atacgggcaa tggatgagat ggatcagcgg gccatgggcg gggaggagcc ggggaggatg 360
 acggtgcgct ggagcaggat gccatcggcg accgtg 396

<210> 5436
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-022-Q1-E1-C11
 <400> 5436

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 aatggcttct cgttcgccca ccattgccct ggtcctcatc cttgcctgct tctcctcgcc 120
 ggcggcgggc ttcaacatca ccaggctact cggacaattc tccgacttca caacctttaa 180
 caacctcctg tctcagacga agctcgcgga ggatatcaac cgccggcaga ccatcaccgt 240
 gctcgccgtg gacaacggcg ccgcgggtg catctcctcc ctcccatcag acgtccagcg 300
 gaagggtgctc tccatgcacg ttgtcctcga ctactacgac accgccaagc tggaggccat 360
 caagaaccac tccgccttgc tgacgactat gttccagtcc tccggccagg ccaccgaccg 420

catgggcttc ctcaact

437

<210> 5437

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-C12

<400> 5437

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agttcccca gatctgcgtg gacagcctcg ccgccaagcc ggagagccag aatgcgacgc 120

cgcgcaagct ggcgagctg ttcgtgaaca tcgcggccga gaaggggtcc gggatggcca 180

ccttcgtgca ccgcaagtac agcgacaagg aggacagcga catgttcagg tgctacgaca 240

gctgctccga cgacgtggag gaggccgtcg cccacctcaa cggcctcgtc cgggagccca 300

ccgacgcca gttcctcgag ctcaagtcgt ggctctctc cacgctcggc ggcacctcca 360

cctgcgatga cgctgcaag gacctgcca agaccagcga caatgacgac gtcgtc 416

<210> 5438

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-C2

<400> 5438

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catgcccgtg ggccgcgtca tgggcgacat gctgacctc cccaccggcg acctgctgct 120

gctgagcggc gccgccaagg gctgctccgg ctggggcttc gggcggcagc cgggtgctgac 180

cccggtcctg tactcgccgc tgaaggtgca tggcccgctg ttcttgccgc tggcgctgctc 240

gaccatcgcg cgcatgtacc actccaccag cgccgtgctg ccctacgcca cgggtgctggt 300

ggccggcggc atcacgaacg cggcgtaaa cttcatcggc gtggacttcc ccaccgaggt 360

gcgcgtggag cggttctccc cgccgtacct cagcgatggg gccgcccggc accgcccggc 420

gctgga 426

<210> 5439

<211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-022-Q1-E1-C5

 <400> 5439

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 ctggagggct cccacaccct gcagaacacg tacgactcgc tcgacgtcca cgtcggccac 120
 tgcctctccg tgctcgtcga cgccgaccag aagcccggcg actactacat ggtggcctcc 180
 acgcggttca tccacgacgc caagtccgcg tccgccgtca tccgctacgc cggctccagc 240
 gccccgccgg cgccgaacat gaccgagcca ccggccggct gggcctggtc catcaaccag 300
 gccaggtcgt tccgctggaa cctgacggcc agcgccgcgc ggccaaccc gcagggctcc 360
 taccactacg gccagatcaa catc 384

<210> 5440
 <211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-C5

 <400> 5440

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 gacccacca tcgccgcgtt caacgacatc atgacgcccg gcaagttcga caacatgtac 120
 ttcgtcaacc tcgagcgcg cctcggcctg ctcagaccg acgaggagct gtggacggac 180
 ccacgcacca agcccctggt gcagctctat gcatccaacg ccacagcctt cttcgacgac 240
 ttcggccgcg ccatggagaa gctcagcttg ttcggcgta agaccggcgc cgacggcgag 300
 gtcatgcggc gctgcgacgc ctacaacagc ggccccgccg tcgccccac catacccaag 360
 atgtgacgac gctg 374

<210> 5441
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-C6

<400> 5441

tctagaactc ccgggtcgac ccacgcgtcc ggcttccccg accacacgca ccgaggcttc 60

gagaccgtca cctacatgct tgagggcgcc gtgacgcacg aggacttcga gggccaccgt 120

ggcaccatca aggccggcga cgtgcagtgg atgacggccg gccgcggcat cgtgcactcc 180

gagatgcccg ccggccccgg cacgtccagg ggcttgcagc tctgggtcaa cctctcctcc 240

gccaacaaaa tggtcgagcc cgggtaccag gagatccaga gcaaggacat cgcgtgcacg 300

tccgacggcg acggcggcgt cacggtgcgc gtgatcgccg gccacgccat gggcgtgcgc 360

tcgccggtgc gca 373

<210> 5442

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C7

<400> 5442

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cctacatgct tgagggcgcc gtgacgcacg aggacttcga gggccaccgt ggcaccatca 120

aggccggcga cgtgcagtgg atgacggccg gccgcggcat cgtgcactcc gagatgcccg 180

ccggccccgg cacgtccagg ggcttgcagc tctgggtcaa cctctcctcc gccaacacaa 240

tggtcgagcc cgggtaccag cagatccaga gcacggacat cgcgtgcacg tccgacggcg 300

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gcacgcgcac gc 372

<210> 5443

<211> 343

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C8

<400> 5443

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agtgggcccc gtacctccgc agcctcctcg cggccggcct cgaccccatc gtcccggacc 120

aatccttgat aagacatttt ca

382

<210> 5446

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D10

<400> 5446

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cgcgccgcg gtggcggtgg cgggaggggc gccgtcgggtg ccggcggggc cgctggacat 180

cgcgagctg ggcgccaagg gcgacggcaa gtcggacagc accccgatga tcctcaaggc 240

gtggaagaac gcgtgcgagg cgacgggggt acagaagatc gtcattccgc cgggcaacta 300

cctgacgggc gggctggagc tgaagggccc ctgcaagtcc tccatcatca tccgtctcga 360

<210> 5447

<211> 214

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D11

<400> 5447

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tggcaggaac aggaactctc tgaagcacgg ggtcagggtg gttcatgttg cttcgattcg 120

atcgtagggg agataatgcc ggatggcttt gtaaagtttg ggaggacatg catcataatt 180

gaagtcaagt gataggatcc tgttttttaa gtac 214

<210> 5448

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D12

<400> 5448

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cagcaggggtg ttacgttcc gtgaactggg ggacgccacc aactccttct gccagaaaa 120
cctgctgggc gagggcggct tcgggagggt gtacaaggga tgcattccag acaccatgga 180
agtcatagcg gttaagcagc tcgacaaaga tgggctgcaa ggtaaccgtg agttcctcgt 240
cgagggtgctg atgcttagcc tgctgcacca tccaaaccta gtcaccttgg tcgggtacag 300
cacagactgt gaccagagga tcctagtgtg cgagtacatg tcactcgggt cactgcaaga 360
ccatctcttc gatctcagtc cgaaatccca gccactttcc tggcacacac cgatga 416

<210> 5449
<211> 118
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D2

<400> 5449
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atcagcaaca acataaataa aggtcggccg ctctagagga tccaatctta ggtcagca 118

<210> 5450
<211> 349
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-D3

<400> 5450
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tctccatcgg ccccggaagc aagaccatcc gcgtgaaggc cgtcaagtgc ggcccgggcc 120
acggcatcag cgtcggcagc ctgnngcggg acaaggacga gaaggacgtg gaggacgtga 180
aggtgacggg gtgcacgctc gccggcacca ccaacggcct gcgcatcaag tcgtacgagg 240
actccaagtc gtcgtcaag gccaccaagt tcctgtacca ggacgtcacc atggacaacg 300
tctcctaccc catcatcata gaccagaagt actgccccaa caacatctg 349

<210> 5451
<211> 333
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D4

<400> 5451

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cgggcccttc accggcaaca agcatctacc agaaacgtgg atctcatagc attggtgcct 120
ctttcctctt tcaccgaaga ttccggtgcc ttatgtcaca ggacgacatg aatcacatgg 180
gtcttgattc ttgtatgaac tcaggattta tagtggatct tggatctgtt cgatgcaaga 240
cctggtctag ccactaaatg atgaactctt ctgctgatat aatatcattt ctagaagaat 300
tcctttgctg gacagtatat tacttatgtg cag 333

<210> 5452

<211> 321

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D5

<400> 5452

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cccggccgtc ctccaaagtc acaagatcct caccgtgatg cacatctaca tggtagatcg 120
ccacgggttc agttcatggc atcaacaggc gctaaatgaa agcgacaggg tcatcgagat 180
ccgtacgac ctattcctct ccgtctacgt tgcgtacag ctcgacttca tcaatcacag 240
ccataatact gtcaccttag aatggtacct cgtcatctta cgtcattcgc ataagcattc 300
acccaacata atgttcgaag a 321

<210> 5453

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D6

<400> 5453

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acgcacacgt ccagcaccgc ggccggcgcg ttcgtgccca acgccagcgt cttcggcaac 120
gggctcggca cggcggccgg catggccccg cgcgcgcaca tcgcgttcta ccaggtgtgc 180

tacgaggaca agggctgcga cggggacgac atactggcag cggtaggacga cgccatcggg 240
gacggcgctcg acatcctgtc gctgtcgctt ggccacgagg atgccatcga cttctcggac 300
gaccccgctct cgctcgccgg gtacacggcg atcctcaacg gcgtgttcac ctgcgccgcg 360
gcgggcaac 369

<210> 5454
<211> 368
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D7

<400> 5454

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gtcgggtcgt cggggacagc tgatttcaca cgacgagccg gcgagccggc cggcatttcg 120
tcgtcggatg gcgcgggctt cctcctcgtc cgccggcgtc gcgtgcctcg tcctgtctct 180
gctcctgtc ctcgccggcg cctccggggc gcacggctcg ttccaggcta ggcgtgtctt 240
gtcagatgac catgggagcg gtatagtggc gcgatggcgg aggttgctcg ccgacgctgc 300
gactccagcg aacaactctc ttgtgtctggc tgccggcagg actcaccgga gcgacccctt 360
cgccaaac 368

<210> 5455
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D8

<400> 5455

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ttgctaataa gcctgcgtgc ccttcgttct tcctcgtctc gatcccgacg acgctccgtt 120
cggctccggc aaaccacatc aagtcgcgat ggagatgaag aaggtcgcct gcgccgtcct 180
cgccgccgcc gcctccgcca ccgtggctct cgccgccgag gccccggcgc ccgccccac 240
cagcgctctc tcggccgcgt tcccggccgt cggcgccgtg ctgggcgcct ccgtgtctct 300
cttcttcgcc tactacctgc agtaaaatta aaggagga 338

<210> 5456
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D9

<400> 5456

ccacgcgtcc gctcgctcc tccattgacc aacaattaag cctccccgac cgccacatct 60
 attaggtgca gccatgggtg cctgtgcaac gaagcctaag acgcttgagg ggaaagcccc 120
 agctgaggcc accatctcca cacccaaggt tgcacctgag accactacca tccacattga 180
 ggttgcgga aaacatgcag tagttgagaa ggtggaggag gacaaggagg aggactaac 240
 agtggcggcg aaacaagagc cagcagccac cattgagcct cagcagattg ctagtgaggt 300
 gaccacttcg gaagtggcgg tcgtcgttgt cgagcctgag aacaaaggagg aggaggaagt 360
 tgtggagaag accgtcatcg aga 383

<210> 5457
 <211> 333
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E1

<400> 5457

gggtcgaccc acgcgtccgc ccacgcgtcc ggtcgtcatc gtcgtgggccc ttcatttctc 60
 ctagaaggtc gagaggagaa gaaggcgaga cgtgcagtc ctcggggtcc gatcgagaac 120
 agggaagcaa gaggctgcta gagatcgagc tcatcaacca atcaagtcgt acgtcgtcag 180
 catcacgcga ccggatggcg cgcgccgcgt ccagctatgt atccaggagg gggctctccg 240
 cagcgatgac ggtggcggag gactccgtga agaattgtga cgacaacgct gtgaagctgg 300
 gaactgtggc caaggacatc gccagcgcca tgg 333

<210> 5458
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E10

<400> 5458

tacaacaccc tatagtgagt cgtattaaac actaacgcct acacggaggg ggacatggac 60
 acgatcccaa agctccgtgc tgcagacggc caggcggacg acgcagtcac tgctgcaccg 120
 gctcgcgaga agcacacagt catggcgaca gagcttctcg gcggtcgccg cagccgcgca 180
 tcaggatgcg gggcggtgc tgctgcaggt gcagtgatta gcgtttaacg gagagctcct 240
 gcatgaagtt aaccacaagt ccacacggta tacacgacgg aacaagtgtt tccatcagac 300
 gatcatcact gaagaatcaa ccatctcatc actgtatgtg tgccgtgttc ttgtcatttc 360
 atcgttccaa tgcaacagaa acgggtt 387

<210> 5459

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E11

<400> 5459

attcgcgggt cgacccacgc gtccgcggac gcgtgggagg acgcgtgggc ggacgcgtgg 60
 gtgcagtcac ctctccatc accaccacca agctcaacaa cagccagctc gcgaaaataa 120
 tgaagagccg cagcatggca tcatcgcccg cgctcttggg gctagccctc gcgctagtgg 180
 cggccaccgc cccacaggta gcggaggcaa agaagaagag agcggcggag agcggcgagg 240
 cggcggaggc gaagaagatc caggacgact tctgctcgac gctgtgcgag ggcaagaagg 300
 ggacggacct ggtcgtgtgc aaggagtcct gcgcgtctc ccagcagtc aacctggtgc 360
 tgtacggcag gatccagtgc aagggcaa at gcaccgagca ga 402

<210> 5460

<211> 323

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E12

<400> 5460

atagtgagtc gtattaacac gtaggcccag cttcagctgc atgcagtact gccacaacca 60
 gttgtgtact gccaacagcg cctccaacgt caccgtcaag ggtgtcagca tcacgaccat 120

caccggcacc tccgcgacac cggaggccct tagcctgctc agcactgcca aggtcccatg 180
caccggcatc acgatggctg acgtcaacgt cgagtagagc gggaccaaca acatgaccaa 240
ggatatatgc acgaacgcca acggcagcac caagggttgc ctcaaggagc ttgcatgcgt 300
ctagaccctc catcgactga acc 323

<210> 5461
<211> 459
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-E2

<400> 5461

ggtccgagaa tcacgggtcg acccacgcgt ccgaaaatga gaaaagctct cctaggtggc 60
ctatcggcga tcctcgctgt ggcgggtggc gtcgggtgtg tcgccaccgt caccgctcc 120
ggcaagaagg ccggcgacaa cttcacggtc ccgggggagg cttcccttgc cacgtccggc 180
aagtcggtca agtccctgtg cgcgcccacc ctatacaagg agtcgtgcga gaagacactg 240
tcccaggcca ccaatggcac cgagaacccc aaggaggtgt tccacagcgt ggccaagggtg 300
gcgctggagt cggtcacagc ggcgggtcgag cagtccaagt cgatcggcga ggccaaggcc 360
agcgactcca tgaccganag cgcgcgcgag gactgcaaaa agtcccttg agacaccgcc 420
caaaaactga aggggcatac ccaaaaatgc cggggggaa 459

<210> 5462
<211> 396
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-E3

<400> 5462

ggtccagaat tancgggtcg acccacgcgt ccggtttggg cagctccggg gcgtggccct 60
ggtagtcttc gccgccactg ctggcgcttc ttcgtgctat ttctgtcga agatgattgg 120
gaagccactg gtgttcacgc tgtggccaga taaactcagc ttcttccaga gacaggttgc 180
tataagaaga gagaagctct tgaattacat gcttttcctc atggtgaccc caacattgcc 240

aaataccttc atcaacttgg cttcaccgat agtagatgtc ccctaccata tattcttact 300
 gggaactctc attggcctta tcccagcttc ttatgtgact gtcagggctg gaatcgctct 360
 tggagaatta acttcgctaa gcgaccttta cgacac 396

<210> 5463
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E5

<400> 5463

gtctagaact cccgggtcga cccacgcgtc cgcgagccgc agaagtgcaa gtggacgaag 60
 aaggcgcgga agaaaaagaa gacgaagaat gagcagaacg ggctggcagc cctagtggag 120
 gagatctcgc tctcgaacag tcccaagcac agggcagcag caggggagat actgcggatc 180
 ggcaaccaca acatacccag caggggtgtt acgttccgtg aactggtgga cgccaccaac 240
 tctttctgcc cagaaaacct gctgggagcag ggcggcttcg ggaggggtgta caagggatgc 300
 attccagaca ccatggaagt catagcgggt aagcagctcg acaaagatgg gctgcaaggt 360
 aaccgtgagt tcctcgtcga ggtgctg 387

<210> 5464
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E6

<400> 5464

cccgggtcga cccacgcgtc cggggctagc tagctagaca aggtccattg agctagcccc 60
 tttgggaaga agggagagga atggcgctgg tggcccgttg agcgaggaag aggctattga 120
 gaaccctgta acaagaattg ccagcagcat ctggacaatc ttgttaacag agttccaaag 180
 gttcaattcc aagcagatac aatttccgag ttggatcgag aagagtgcgt gcatccgac 240
 cgtccgtcca cgttcgtggt tcgtataagc taggtttcat caaccatggg cacaagatg 300
 aagaagggca tcctgaagcc gttccgctat atctcgaaca tgatggacgg taaggagcct 360
 gaaatgcaaa ttgggctccc cacggatgta aaacatgtgg cacacat 407

<210> 5465
 <211> 366
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E7

<400> 5465

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 cgggacacgc tgcgcggtct ggacggcgcg ccgccgggcc cgctgcggaa ctggggcacg 120
 ccgggtccgt gccggggcaa ctctctctcc tggtagcgcg tgcgtgcca cggcaacggc 180
 tccgtgcagg gcctgcagct ggagcggctc ggctgtcgg gtggcgcgcc cgacctgtcc 240
 gtctcgccg tgctcccggg cctgcgcgcg ctacgctct ccgacaacgc gctcaccggc 300
 gccttcccca acgtgtccgc gctcgccgtg ctcaagatgc tctacctgtc gcggaaccgc 360
 ctgtcc 366

<210> 5466
 <211> 367
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E8

<400> 5466

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 atgcagctca cgagctccac caaatgctga cctcccaaag ctgtggctcg gatccaaaca 120
 gaagggaaat gatcaggcga caaccggca tggatcggtt cctgcagctg ctggcccgccg 180
 gcgtggccgt gctactgcta gtggcaccgc gggccatggc tgacgacgac attgtagaag 240
 tcggcgtaa ctggggatcg cagctctcgc acccgcttct ccccggtcc gtggtgaaga 300
 tgctcaaggc gaaccgcac gccagggtca agatgttcga cgccgactcc tggcccgtcg 360
 gagcgct 367

<210> 5467
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E9

<400> 5467

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agatcgcaaa aatccttgct gcatacggcc aggcggccga cgcggtcgct gcggccccgc 120
ctcccagaaa gctcaaagtc atggagaaga ctttctcggc ggtcgccgcc gccgctcatc 180
aggaggcggc ggcggctgct gctgctgctg cagtgattaa ggtttaaggg agagctcctg 240
catgaaatta accacacgct cacacgtata cactacggaa caagtgtttc catcagacga 300
ccatcagtga aaaaaaacca tccttctctg tgtgtgtgcc gtgtttttgt catttcttct 360
ttccattggc aaagaaaccg ggtaaccttt tttt 394

<210> 5468

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F10

<400> 5468

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agcggaggca aagaagaaga gagcggcgga gagcggcaat gacaacggcg gcggtgatgg 120
tagggcaagt attccaggca atgcggagcc agccgaagcc gaagagaacg gcagccggtt 180
gccgccatcc ttgcagtggc tcaacagcct gttctcgcca tcggcgagcgt cctccggtag 240
cggcagcggc agttcgcctc attgggagaa ttgagcaata atgcaatata aggatggatg 300
attgttgctg cttgagccca ttggtgccaa tgtacatagg aagagcagga gcatgccggc 360
atgaaaattt ggagcccttt tt 382

<210> 5469

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F12

<400> 5469

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catcgctcctc tccggtggca ccaccatggt ccctgggatc gctgacagga tgagcaagga 120
gatcactgcc ttggtccca gcagcatgaa gatcaagggtg gtcgctcctc cagagaggaa 180
gtacagtgtc tggatcggag gatccatcct ggcatccctc agcaccttcc agcagatgtg 240
gatcgccaag gccgagtacg acgagtcggg cccatccatc gtccacagga aatgcttcta 300
attctttggg cccgagaaat gcaagccgtg ggggagccgt taccgccgcc agcctctcct 360
gccccggtt tcgttgccgt ttcttcatta gcgcgaacaa agttttgtg 409

<210> 5470

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F2

<400> 5470

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gaagaagggt gacgccgtcg tccacactct cagctaacca gtgcctgggc cgcggttggc 120
cacggtgggc gacctgggtg gttcaccggt gactgcgaa tctaggcggg tcttcctggg 180
gctcgatctg ggtctcatgg ttggctaatt tctcaccgga gcatttgggg gacgggcccgt 240
gcgcctcaa tttctcgccg tcgacgtgtt ctccgccgcg ggactacagc gtgccatggg 300
cgggactcct gggagcttaa tccgcgcgcg aggtcacgag tcacctgaag atcatcctgg 360
tacctggaat ctca 374

<210> 5471

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F3

<400> 5471

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ggcgcgccct gcggcgggtg ctacgaggtg cgctgcgtgg acagccctag cgggtgcaag 120
cccagcgcg gcgactggt ggtgacggcg accgacctgt gcccgccaa cgaccagcag 180
tccgcggaca gcggcgggtg gtgcaaccg ccgcgggagc acttcgacct cagcatgcc 240

gcgttcctcc agatcgaca ggagaaggcc ggcacgtgc ccatctccta ccgcaggggtg 300
gcgtgcacga agcaggggtgg catccggtac accatcaccg ggaacaagta cttcaacatg 360
gtgacgatca ccaacg 376

<210> 5472
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F5

<400> 5472

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ggacaagtgc acggcgtgcg acaagaccgt ccacttcacg gacctcctca cggccgacgg 120
cgccatctac cataagacat gcttcaagtg cagccactgc aaaggggtcc tctcgatgtg 180
cagctactcc tccatggacg gtgtgctgta ctgcaagacc cacttcgagc agctcttcaa 240
ggagaccggg agcttctcca agaacttcac gccagggtggc aagtcacag acaaggggtga 300
actgacaagg gcccgaagca agctgtcgtc tgcattttct ggtaccaggg ataagtgcgc 360
agcatgccag aaaac 375

<210> 5473
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F6

<400> 5473

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catgtcggcc tactgcggaa agtacaagga tgagctcatc aagaatgctg cctacattgg 120
cacccttggc aagggtatcc ttgctgctga tgagtccact ggcaccattg gcaagcgcct 180
ttccagcatc aatgtcgaga acgttgagga gaaccgccgt gccctccgtg agctcctatt 240
ctgctgccct ggtgctctcc agtacatcag cgggtgtgatc ctcttcgagg agaccctgta 300
ccagaagacc aaggatggca agccttttgt tgatgtcctc aaggagggag gcatcctccc 360
tggcatc 367

<210> 5474
 <211> 368
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F7

<400> 5474

agtcccggt cgaccacgc gtccgcccac gcgtccgca gcggcaggta ccgctggtac 60
 agctcgccgc cgttggtccc gccggcccag ccgccaccgc acacgcccgc gtcctcgatg 120
 cagctctgga tccgacgcca cgtctcatag tccccgacca tgtcctgcag ccagtcggag 180
 tagtccgca tccggtactc cccgtaccgc gcccgggaca cggcggaggc ggcgccccgg 240
 ttggtgacgg cgaacgcgaa ggcggtggcc acgaacatgc cgatgaggat cacgaagatg 300
 gcgacgacgt acgcccagag gagcggcgtg gcgcggcagc aagcgccggc cagagccagg 360
 agcgacag 368

<210> 5475
 <211> 394
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-028-Q1-E1-F8

<400> 5475

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 ggggttgtct tgccacggtc tacctgtgat gttgttgta cgatgcaagc acagcgggaa 120
 gccccgcctg acatgcagt caaggataag ttcctagtcc aaagcgtcgt tgccccctgct 180
 ggtataactg tgaaggatgt cactggggat atgtttacga aggagtctgg gtataagatg 240
 gaagaggatc aattgagat gacatatgtt gtcctccac agccaccctc tccagttcca 300
 gaggaatctg aagaagggtc tccacctang gcttctgaat cagaaaacgg agatggacct 360
 tctggaggat tcaccagagc actaagagaa cgca 394

<210> 5476
 <211> 387
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F9

<400> 5476

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gacgaccccg cctgcaccaa gatgtgcaac caggcgtgcg gcagcaccga caagggcgcc 180

gccgccggcg cgccggcttg atcgaccgg gctttatcgg cgcgcgggct cagctcgata 240

tcacatata caatcgtttg ctagctccgt cgttcacgtc agcccatgca tgatctctcg 300

acccggccca ttgaatcttc tccctctact acattatcgc tttgttgcag gtcacgttc 360

tcatacatcg atccactcat ccttttt 387

<210> 5477

<211> 383

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-G1

<400> 5477

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acggcgtcgc gcaggccacc gggtcgctgg tgcacgaggc cgccgtcgcg ctgcggagct 120

gaccggcccg gacgggacgg gacggaacgg aagcctacga tcgactgtac atacaggggt 180

tgggacttgg gagggagctc gggttcttgt tgggttttcc tttgggtgga gagcgaggga 240

gcgcagtcga gagccagcga gcagtctctc gtgcagtga gtgcagtga gtgcagtga 300

gtcccgcggt agatgagatt gtattgtgac caagccggga gggaaagcan ggangggaag 360

acaaagatgt tttgtcacgt ttc 383

<210> 5478

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G10

<400> 5478

ccacgcgtcc ggggacgcgt gggggccgacg gtctcgggtct cgcaggggca gggctgggcg 60
gtcgacggag gccaatcttc caacttcttc cctccgtcga tcatccagca ccagcaggag 120
aatcccgtcg aatccccctc tcaaccaagg gcgcgcgcgc gtgcgtatgc ctctccaga 180
tccaaagcaa cagacagcga gggggcaccg gggtcgcgcg catgtttgcg atttatggag 240
gatcatgctt tcttgcttac tacattagct cctgacgcgc cgcctctccc tcgcgttcat 300
tgatttctgt tataattact accgagctac tatctccaca ttattattgg taaagaaaga 360
aagggcgctt cctctaattt gatgggcatt ccgtt 395

<210> 5479

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G11

<400> 5479

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agcgtcccga aggggaagct ctgataacat caccgttgct atcgtccgct tcctatatgg 180
aactaccggt gataaatcag gcgcagacaa agagaccacc aatgaccaaa actcctaatt 240
acctcctgta gggatccctc atgcgtgtgt tttcttctgg ctgttgatc tgatgctcaa 300
agtagatgct ccgtgtgtct tccgctgctg ttccgcaagg aaactgactc ccccgaccgt 360
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<210> 5480

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G12

<400> 5480

ccacgcgtcc ggcattgatgc gtcgccgagc catgacgatg acaatagccg ccgtgctctg 60
cctgctcttc ttctctggcc gtctcgccgc ggcggagaag actttccgcg gaggcggagg 120
cggaggctac ggcgggttgg aggccggtgg cggaggcggc ggcggcggct actccacccc 180

gagcgaggca gcgccatcca cgctgccgc tggggagacg acgacccctt cgtcaggcgg 240
 cggttactcc acccctagcg aggcagcgcc atccacgcct gccgctgagg agacgacgac 300
 gactccttcg tcaggcggcg ggggttacgg cggtgcaacc ggcaaggctt cctcaagcgg 360
 cggcgggctg gaccccgac 379

<210> 5481
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G2

<400> 5481

gggtcgacgc acgcgtccag gctgaggcgc accacgttca gggagacctc gcggcggttct 60
 acaactgccg gttcgacgcyg ttccaggaca cgctgtacgt gcacgcccgg cgccagttct 120
 tccgcaactg cgtcatctcc ggcaccattg acttcatctt cggcaactcg gcggcggtgt 180
 tccagaactg cctcatcgtc acgcgggcggc ccatggacaa ccagcagaac tcggtgaccg 240
 cgcacggccg cacggacccc aacatgaagt cggggctcgt catccagaac tgccgcctgg 300
 tgcccgacca gaagctcttc cccgaccgct tcaagatccc ctcgtaacctg ggccgaccct 360
 ggaaggagtt ttcgcgcctc gtc 383

<210> 5482
 <211> 399
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-G3

<400> 5482

acgctgccgg tgacggctcgt agaattagcg ggtcgacnca cgcgtccgcc cacacgtccg 60
 cccacgcgtc cgcccacgcyg tccgctcacy cgctccgccg cctccatttc ttcatggctc 120
 gcttcgcgcc gctgacgtca acgggggtccc agcagtaccg cgccctgacc gtcccgagac 180
 tgaccagca gatgtgggac gcgaagaaca tgatgtgcgc ggccgaccgg cggcacggggc 240
 gctacctgac ggcgtcggcc atgttccgcy ggaagatgag caccaaggag gtggacgagc 300

agatgctgaa cgtgcagaac aagaactcgt cctacttcgt ggagtggatt ccgaacaacg 360
tgaagtcgag cgtgtgcgac atccccccca cgggcctgg 399

<210> 5483
<211> 384
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-G4

<400> 5483

cgggtcgacc cacgcgtccg cccaggcaag cgatcgtcgg agcagagaga gacttcctcg 60
cctccatccc atccccgccg cgcggtctct acggtcgcta ataagccgcc gcatccaggg 120
atggagatga agaagatcgc ctgcgccgtc ctcgtcgccg cctcggccac cgtggcgctg 180
gccgcggagg cgccggctcc gtctcccacc agcggctcct ccgcggtcgc acccgccatc 240
gtcggggccg ccgtggcctc cttcttcgcg tactacattc actgagccgc cggacgagga 300
gccggagccg gagggaagag accaaggtgg ggggagagac ttggctgcgc tgcgctgctc 360
tgctgctcnc gcgcattccc gatg 384

<210> 5484
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G5

<400> 5484

ccacgcgtcc gcggcaaag acctcaagaa agtgtcgctc ttctcccga ctcgcatcta 60
cgccgtggct tccatctccg gattcgacct ccgcatcct tcccacagca cccaagcaga 120
ccacagcaac ggctgcaacc cctgctggaa cgccgtggta cacttccca tcccggctgc 180
cgctgacacc cgccgctcg cactccacgt gaggtccgc gccagcgtc tatacctggg 240
cgatcgcgac atcggcgagg tgtttgtgcc catcgacgac ctcttgccg gcgccgacaa 300
gggtggcgat ccgaggcccc tgagctacca agtgcgcagg ccgcactctg ggccgcacca 360
aaggggtccc ctaaa 375

<210> 5485
 <211> 201
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-028-Q1-E1-G6

<400> 5485

atagtgagtc gtattaaaaan agtgtcactc ttctcccgga ctctcatcta cacggtggcg 60
 tcgatctcgg gattcatcat ccgcatcatc tactgctgca caggaggagg atagactgcc 120
 cgggtgctaata ccagctgtcg agcagtggta cacttcacca tccaggcgcc cgctcacact 180
 cgcagactcg catcctacgt g 201

<210> 5486
 <211> 386
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-028-Q1-E1-G8

<400> 5486

gggccgaccc acgcgtccgg caagcgcgcc atcggttcc gcgacgccgt caccatccgc 60
 gccacgatga gcatggtggc gcaggacacg cagaactgcy acgaggagtt caggaaggcc 120
 gtctccaaga accccatgga ggaccacaac aggtcgctca tcgagatgtc cgagatctgc 180
 cgcacgtctt ccaacatgat cccttacgaa catgtccatt gatttggttg tttctttttc 240
 ccgacccctt actacgttcg gtaacgtcgt cgtcgtcgtc gtcgtcgtcg tccggcctaa 300
 aacatatgta atttgatgct ggtcgcgtgt gtctgtcagt cgatagactg gacgcatgcc 360
 gacttcatgc ggacctancg cgtgtc 386

<210> 5487
 <211> 377
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G9

<400> 5487

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agatctgccc gattccgccg cccggaccgc gggactccct cccctcctcg atccgttcgg 120
 gcggccggcc ggcctagctt caagtgcggg gatggtgttc tacttcaagg cgcgccccga 180
 ggccggcgac tataccatct tcatgggtct tgacaagtac gagaacgagg acctcatcaa 240
 atacggcttc cccgaggaca tctgggtcca tgtagataag atgtcctctg cacatgtgta 300
 tgtgagattg aataaaggtc aatcaatgga tgacatgagt gagggtttgc tggaagactg 360
 tgcgagctt gtcaaag 377

<210> 5488

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H10

<400> 5488

cccgggtcga cccacgcgtc caccacgcgt ccgcacattc aagcacctcc tcttcccccg 60
 ccgggcaaca actcagccgc cgcaaccgcc acatcagcca tgggcgcctg cgcaaccaag 120
 cccaagacgc ttgaggggca ggccccagct gagggcgccg tctccacacc caaggttgcg 180
 cccgaggcca ctccaatctc cgttgaggtt gcggctgatg aacaggtagc tgagaagggtg 240
 gtggtggagg agccggctgc ggccggccgac gttgagcatc agaaggctaa tgagggtgctc 300
 gctccagagg cggtcgtcgc cgagcccgcac cacaaggagg acgaagccgt ggaga 355

<210> 5489

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H11

<400> 5489

ccacgcgtcc atttcgttat cctcctcgat cttaattaca ggtcatagct aagcaggctc 60
 gacaggatgt cgtggcagac atacgtcgat gagcacctca tgtgcgagat cgagggccac 120
 cacctgacct ccgtcgccat agtcggccac gacggcgccg tttgggcccc gagcaccgca 180
 ttcccacagt tcaagacaga ggagatgacc aacatcatga aggacttcga cgagccccggg 240
 ttcttgcccc cgaccggcct cttcctcggc cccaccaagt acatgggtcat ccaaggcgag 300

cccggcgctg tcatccgcgg gaagaagggga tctggaggca taactgtgaa gaagacaggg 360
caagcgatgg tgggccggca tctacgacga gcccatgacc cccg 404

<210> 5490
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H3

<400> 5490

gggtcgacca cgcgtccagg aattttcgtg ttgacaagtg gctgtctatc cagttggaga 60
gttcatgctt caatagtctg gttgttcacg ggatgttctg ttctccctat cacggtaact 120
atatgatgat gatccttgc ttaattcatg aacacttggt tcaagattat gtccattaca 180
ttttgcttgc attgtcaaga ttgtggattc ttggtgttca tgacgttgta atgttaatga 240
accggctggt aacgccatgt ggtactggta cccctgtatt ttcagttgct gtggcacctt 300
ggctctctct ttgaaaaacc agtatgtata tgacaatgat caatttatcc atattcctac 360
ttcattccca aaaa 374

<210> 5491
<211> 346
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H5

<400> 5491

ccacgcgtcc gcccacgcgt ccgcggacgc gtgggggttc ctctctcacc atagcgcccg 60
ctctgtcgcc cttcgttcac ctctccttcc tctcgtccct gcctgccagg gagaggggaa 120
gtcagaggca cggagtggcg cagagcagac gcccgtaac cattgtagct gtccctgtcg 180
tcgtcgtcgt caacgaaccc acacaaggaa aggatggaga agaagccgac catcctcatg 240
aacaggtacg agctcgggcg cacgctcggg cagggcacct tcgccaagggt gtaccacggc 300
cggaacctcg cgtccggcga gagcgtggcc atcaaggta tgcaca 346

<210> 5492
<211> 335

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-H6

 <400> 5492

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 ccagcacgag atactagcca tcatgcgctt gtcgtccctc ctctcgtcg tggccgccct 120
 ctcggcgcgc gccgcggcgc agcaggtgcc gccggtgggc ggcagcgctc tgaagccgga 180
 ctactacagc cagtcgtgcc cgcgcgcgga gcggatcatc gcggaggtga tgcagacgaa 240
 gcagatggcg aacccgacga cggccgcggg catgctgcgc gtcttcttcc acgactgctt 300
 cgtcaccggg tgcgacgcgt cagtgtgat cgcgt 335

<210> 5493
 <211> 337
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-H7

 <400> 5493

 ccacgcgtcc gcccacgcgt ccgcccacgc gtccgggttg cgatggttgt ggcgttggtg 60
 ttcttggtga gcggcgcatt gtgcggtcct cccaaagtcc cccagggcaa gaacatcacg 120
 gccacctatg gcaaggactg gctggacgct aaagcgacat ggtatggcaa gccgacgggt 180
 gccggtcccg acgataacgg tggcggctgc gggtaacaagg acgtgaacaa gcccccttc 240
 aatagcatgg gcgcattcgg caacatcccc atcttcaagg atggtctggg ttgtgggtcc 300
 tgcttcgaga tcaagtgcga taagcctgtg gattgct 337

<210> 5494
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-H6

 <400> 5494

 ccacgcgtcc ggagagcctt accctcgaag ccgaaggcct cgtgccttct cttcctccct 60
 ggcattggagg aagtagctgt ttcgcctatg atcgttgccg ccgtagtgct ggacaacaat 120

ggcgccgacg cggtctcttg cactgccatc cctagcgtaa caataagcct agaggagaaa 180
gaaaatatca atggggatgt tcccacgac acctcggccg caagcaacga ggaggaggcg 240
ttgttcagtg tcggagaatc caccaaggac gatggccatc gcttgacgat ggaatgcacc 300
actcccgtct cctccagtag cccttcact cgcaagaagc gcggggcggt cagcctcttc 360
agggcgatgt tcctgtcctt cgcccgagc gacgacagca tgaagaagac agacgacgac 420
accacgagcc cca 433

<210> 5495
<211> 311
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H7

<400> 5495

ctcacgcatc caatgagcgt cacggtcgaa accgatgggt tcgtgcattc tcttcctcac 60
ggacatggag gatataacag ctgcgccaag gatagtgtct tcttcgcggt tgaaaaccgt 120
gggtgcagca ccggttacgg ggacttcac ctgtagtgggt actcgcagat gctgctggag 180
cacggctaca tcactctgtc gggcaccact tccgtgttcg gatccgcgcc cgtggacgtc 240
tccgtgaatg tgggaggcat ccaactgggac taaggcagac ggtcgcagac cccatgtctc 300
atcgctggct a 311

<210> 5496
<211> 351
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-H9

<400> 5496

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tcaccacagg ttttccatta acctctctgt ctgcctcctg aagttactca accgggtgtt 120
cgggtgtgcc aagattacct tggtcattct ctacacatgt tgtcaactag ggtcacacgg 180
aaagtttata tattatcata ccattagagt tatagaattg gttcccaaac ctggagtagt 240

atgtcattct aattcattcg ttcctgcagc ttgactttc gggaccgcac ctctgcaaag 300
 ttcatctgtt atcaagttca aataatagga gtttccttac gttaacacat t 351

<210> 5497
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A1

<400> 5497

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 ctgcaagaaa gtcccaactg aagggtgcaa aaagttcaga catcagagga gggaaatcctg 120
 caaaaaagtc atcgccctta cagaaaaagc tgagtgtccc ctcaccaacg gtaactaaga 180
 agagcggaac tgaaggaaag aaaactccaa atggaaaaac aggagccaag aagtaagcaa 240
 ctcaattgaa acttcgtttt gttgggacca acttcacat ggccggggac agataaacat 300
 gttgatecta tctactgggt gatacattgg tgttttgaca cacggatatg tcagtcctat 360
 tggttgagag agcatgctgg atcttcggcc atatgctgta aatcgcttgt taatttttgt 420
 tctactagta cacgaag 437

<210> 5498
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A10

<400> 5498

attcccgggc cgaccacgc gtccacgaga tcgtcttcga gaaccccgag aagagcatag 60
 actccctcca cctcgacggc tacgccttct tcggcgctcg gatggggcct gggacgtggt 120
 cgccggagat gaggaagacg tacaacctac tggacacggt gagccggcac acgatccagg 180
 tgtaccgcg gtcattggac gcgatcatgc tgacattcga caacgcgggc atgtggagcg 240
 tccgggtccaa cgtctgggag cggactacc tcggggagca gttctacatc agcgtcatct 300
 cgccggcgcg gtcgctgcgc gacgagtaca acatgcccga caacgccctc cgctgcggca 360
 aggtcgtggg gctgcccgtg ccgccatcct acgccccgc g 401

<210> 5499
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-A12

 <400> 5499

 ggtctagaat tcccggggccg acccacgcgt ccaccacgc gtccgccgtc gatcgcggtc 60
 acgcggtgcc gtcgacgcgc gccttgggtga cgccggcgca ggcgtcgacg aagtcgccgt 120
 cgatgaagtc ggtggagaag agctggagct tgtcgccgag gcccttggcg aagacctcgg 180
 cgatgaacat ccgcgcgtag ccgtggatcc gcctcgtcac gggccacacg cacaccaccg 240
 ggttgtcggg cctggggcgtc accgtgttct ccaccggta caagaaccg cgggccgcca 300
 ccggcggtg ctgccccagg aacttgaggt tgctctcgaa cttggtctcc ggcaggtccg 360
 tgtcgatcca gttgtccctg aggtaccg cgctccaca gggctcccc 409

<210> 5500
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-A4

 <400> 5500

 ggtcaagaat taccgggtcg acccacgcgt ccatgtccat ctacggtgct tctgctcgcc 60
 ggcccaaat cgctcatcg accacgcccc ctccaggct cccgtctcca tgggtctcct 120
 ctcaaacagg attgggaggg agagcctcaa ggcgggggat catatctact cctggagggc 180
 ggcgtgggtc tacgcgcac acggaatata tgtgggcgat gataaggtga tccatttcac 240
 aagaggaaga ggacaggagg tcggaacagg aactgtcgtc gatattattc ttgtgagttc 300
 cccccaaaa cgaagcaaca cgcttgccc ggtgtgcacc gacgaaacca gcgacagcag 360
 cacagagacg aacggcgtgg tctctcctg tctcagctgc ttcctacctg ggggtgctct 420
 ctaccgtgtc gactac 436

<210> 5501
 <211> 408
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-034-Q1-E1-A5

<400> 5501

ttccccgggcc gacccacacg tccagctata ccttcgggta cgaagattga cttctgtcaa 60

acatcagatg ggaagcttat aacagaaatt gatgggaaac aaattggtgc tgttcggagc 120

aaagatcttt gcaaggcttt cttcgacatg tatattggtg attcaccggt ttcactggag 180

gccaaaaaag tcgttgccca gaacgtggct gggctcattg gaagacgctg aggatagcga 240

gaggatggtt atttcattct tctgtacagt tagagaggat tcatatgagc gggaaaatag 300

gccaaagtatg tagagtgatc tgtcttgat agaaagcagg caaaaaggtc caatgtatat 360

gtggaaggta ncatcttcag ttgtgctang cctccattct tttttttt 408

<210> 5502

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A6

<400> 5502

gtacaggtct agaattcccc ggccgaccca cgcgccaag gcgcagtacg cggtgcgcgg 60

ggagctgtac ctccgcgcct ccgagctcca gaaggagggc aagaagatta tcttcaccaa 120

cgtcgggcaa ccgcacgccc tcggccagaa gccgctcacc ttcccgcgcc aggtggtggc 180

gctgtgccag gctccgttcc tctcgtatga cccaatgtc ggcctcatgt tcccgcccga 240

tgccatcgtg cgggccaagc gctatctcgc catggcgccg ggaggtctaa gtgcgtacag 300

tgatgcccgt ggtatccccg gaatcaggaa ggaagttgct gacttcattc acaagcgtga 360

tggatatccg agtgatccag aactcattta cctcacag 398

<210> 5503

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A7

<400> 5503

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 taaatattac attcatgctg attcagatgc ttgaccttca agcagctaag ccaacgtcgt 120
 tggttggagc ggttttccta aatctactct tagaaaatga tcgagcggtc gacattcttt 180
 actgcataac cttcaaactg atggatcaga aatggcttga aatgcacgcc agttacatgg 240
 atttcaatac ggttattaaa tcaacacggc gccagctcga gagggagctg ttgctagaag 300
 atatccagag aatcgaggac atgccatcgt acaggtttct cgctgctag caattgaacc 360
 tctggtcgt accgaacatt gccacaagat agtgcagctc catacactcg aag 413

<210> 5504

<211> 272

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A8

<400> 5504

attcccgggt cgacccacac gtccagcaaa ccgagagggtg aaccagcagc ctccaataaa 60
 agccagcaca tccaaataaa accgagagac ctgagccctc aggcaagccg accgccgacg 120
 taccaccgcg ccaggccgag agaaagatgg agattatcaa gaggatcctc atcgccgcgc 180
 tctctgtaat cgccgtctct gacaccgag tgctggcctc caccgaggcc gccgcctccg 240
 gtaccccagc cgcttcagaa tcgtcagcgt cc 272

<210> 5505

<211> 141

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-034-Q1-E1-A9

<400> 5505

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 aaatggcaac cgggtgtcgg ttattcttgt ctgcatgtcg ttactcggat gttatagtag 120
 aacgaactgt tcgtactgca a 141

<210> 5506

<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B10

<400> 5506

taacggtcta gaattcccg ggcgaccac gcgtccaccc acgcgtccgg gatcctaata 60
aaatctactt gatgggcca tcagcaggag cacatatcgc ggcttgcgct ctcttagagc 120
aagcaattaa ggaatctaag ggagagaata cctattggaa tgtgggtcaa ataaaagcat 180
atcttggttt atctggagga tacaatatcc aaaatttggc cgatcacttt catgagcgtg 240
gtctttatcg ttcaatatct ctcagcataa tggagggaga ggaatcactg ccacattact 300
cacctgaaat tgctgcaaaa aaattaagtg cagaaacat atcttacta cctcagattg 360
tactattgca tggaacagca gattactcca taccatcatc tgccagcgaa acttttgctg 420
atg 423

<210> 5507
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B11

<400> 5507

gggtcgaccc aagcgtcaac ccacgcgtcc gatgatacag aggggtggaag tgtatgatgc 60
tatctcacat ttgaagacat tgcaaaagaa gaagctaaag ctttccaaag gaaaaaatga 120
tggtcaaggg gagcagactt atgttattgt ggaggcatcc aagttcaaga gggttggcag 180
gaagactacc ttgcggcagg atttggccaa tgctctagat ataagggcct tcgagaggat 240
gacgaagcta ggccactgcg atgtggagct tcttagaaaa gagatgaatg agactgatgt 300
ccccgtatct tactcaggca ctggcatccc tgagaagtca atacgcaaag cagctcttga 360
ggttattctc cgcaggctcc tctcttttct caagccagac acctt 405

<210> 5508
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B12

<400> 5508

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ccgctaacgt aacggaaata gcaaaggcgc gcaagctgat cgatgtccat ggccacgggc 120
tgtgcccggt gcggttcgag cacacgcgcg ggatcagcgc ggtggccagc agctgcaagg 180
accgcccgt gccgtcgccg gagcgctgct gcggggcgct caaggcctac gcgtgcccct 240
acagcgagct catcaacgac aacgccaaaca acggctgcgc cagcgagatg ttctacgtca 300
tcatgacacg cggcaggctg cggccggggc tcttctcgca gctgtgcgtc gaaggccgc 360
tgggcctcca gtgctgatca aactggcct gctgccgcc aacgcccgga atccaacat 420
ccaaccaacc 430

<210> 5509

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B3

<400> 5509

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ccgagccggt cggctctggc tggctctggc tgctgcctg ccaggtcacg cagcctggct 180
ccaccgatcg cacaccatac attgacgtcg tcgtcgcggc cgtacgtgcc gttggacggt 240
ggaggaggcg gtggcgctac gacagtatat atatacaca ttacacatac acaccccaaa 300
aagaaaagaa aaaaactact gccattgctg tcgttgctgc tagcttctct ctatatatat 360
accgtatatt aaattctcga caaaatttgt ttgaccacgg tgatctgtca tatatgtcgt 420
cca 423

<210> 5510

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B5

<400> 5510

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cggcatgatc acattgaaac ggcgtgatca aaacaggaga tgctgcgagc agatgaaagg 180

gatggaacga gttgggcat gagctctcct gatgagcagg tgtttttttc agggctggac 240

agacagacag ccccatgcc a tcagggaag ctgagatgga agtgggaagct gttgtagtgg 300

ggttttcagg tttcatgcaa ccagattttg ctctacctga actagacaac aatgttgttg 360

ctgctgctgt tgtacaagat ctttttttgt gctcgcttgt gatgataata tgcattggcaa 420

gctccaaaat gtg 433

<210> 5511

<211> 434

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-034-Q1-E1-B6

<400> 5511

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gacgatcgat ggccgcgacg gcggcgagg agatggagag gatggtggag gcggagtggg 180

aggaggggat gaggganggg aagcggtagc ggctggtgga gtaccgggag ctgccggctt 240

acctgcggga caacgagtac atccaccgcc actaccgctg cgagtggccg ctcccgagg 300

ttctgctctc cgccttctcc atccacaacg agaccctcaa cgtctggacg catcttatag 360

gatttttcat ctttctcgct ctgaccatat acacagcagc acaagttcca aatgcagtag 420

atatcgggag cttg 434

<210> 5512

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B8

<400> 5512

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ccgtggaggc aatgccgacc gtggaaatcg ccggcggcaa cgatggcgac gacgcggcca 120
gctgcccgtt ctgcctggag gactacgcgg ccggcgagcg cgcgccgag atgccctgca 180
ggcacagggt ccacggcaat tgcacgtgc cgtggctcga gatgcacagc tctgccctg 240
tctgccggtt ccagctgccg gccaccgacg acaagagctc atgcagcggc ggcgacgggtg 300
gtttcgtcag tgctgatgcg gatcgtgaag gcagtgacaa cggcgggggt gatggtaggg 360
caagctctcc gggcaacgcc gagctagctg aagctgaaga g 401

<210> 5513
<211> 428
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-034-Q1-E1-C1
<400> 5513

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tcgggcgcca cgctccgtgtt cggcgccgcg cccgtggagg tctccgtgaa ggtggccggc 120
atccactggc actacggcag ccggtccac gcaccggagc tcaccgcggg ctactacaac 180
acgcggcgcc acgacgggta cctcaccatc gcgcgcctcc tggcgcgcca cggcgccgtg 240
ctcaacttca cctgcgtgga gatgcgggac cagcagcagc cgcaggaggc gcggtgcatg 300
ccggaggcgc tggtcgggca ggtgggcgcc gcggcgcgcg ccgccgggggt gggcctcgcg 360
ggcgagaacg cgctgccgcg gtacgacggc acggcgcacg accaggtggt caccacggcc 420
gccgagcg 428

<210> 5514
<211> 362
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-034-Q1-E1-C10
<400> 5514

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gaaggacgtg agcgacgtga cgggtgtggga ttgcgtgctt aggaacacca ccaacggcgt 120

gcgcacatcaag tcgtaggagg aggccgagtc tgtgctcacg gcgtcccatc tcaccttcga 180
gaacatcagg atggaggagg tggccaaccc catcatcatc gaccagtact tctgccccca 240
gaaggctctgc cccggcaagc gaagcaactc ctgcgatgct tccatcaaga acgtcacctt 300
ccgcaacatc tccggcacgt cgtccacgcc cgaagccgct agcctgctct gctccgagac 360
gc 362

<210> 5515
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C11

<400> 5515
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gcactccttt ttctatcgaa gagattactg aaagggaaat gtgcccttgg gccatttcta 120
agtatttttg gattgagtgc caacacaagt gcttaaatgt gaatttatgc tcatggatgg 180
ataaagtgca aatcaatagt aaaggatatgt ttctaagcct tagtacattg gttttgtgta 240
ctaataact tgtctaagtg ttagaaacag aaagaagaag aaaagaaaag aggtgaaaaa 300
gacttggtg tgtacagcta aaactcagct cagtctggca caccggactg tccggtggtg 360
caccggacag tgtccggtgc gccaggctga ct 392

<210> 5516
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C12

<400> 5516
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gaatctgcca tcctctccaa cacgaagatg gcgttcatca gcaatgtcgc agtgaaggcg 120
gcggccgtgg ccgcggtgct gctggtcgca gcggtgtcgc ctgccgcgcg cgcggcggcg 180
gtggcggtgg cgggaggggc gccgtcggtg ccggcgggtc cgctggacat cgcgcagctg 240
ggcgccaagg gcgacggcaa gtcggacagc accccgatga tcctcaaggc gtggaagaac 300

gcgtgcgagg cgacgggggt acagaagatc gtcaccccg cgggcaacta cctgacgggc 360
 gggctggagc tgaagggccc c 381

<210> 5517
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-C2
 <400> 5517

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 ctaagacgct tgaggggaaa gccccagctg aggccacat ctccacaccc aaggttgac 180
 ctgagaccac taccatccac attgaggttg cggcaaaaca tgcagtagtt gagaaggtgg 240
 aggaggacaa ggaggaggca ctaacagtgg cggcgaaaca agagccagca gccaccattg 300
 agcctcagca gattgctagt gaggtgacca cttcggaagt ggcggtcgtc gttgtcgagc 360
 ctgagaacaa agaggaggag gaagttgtgg agaagaccgt catcgagaag gagaagccat 420
 c 421

<210> 5518
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-C3
 <400> 5518

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 aggttgcggc tgatgaacag gtagctgaga aggtggtggt ggaggagccg gctgcggcgg 180
 ccgacgttga gcatcagaag gctaattagg tgctcgctcc agaggcggcc gtcgccgagc 240
 ccgaccacaa ggaggaggaa gccgtggaga agaccgtcgt cgaggaggag aagccagcgg 300
 cagcagccca tgcagaggaa aaggtcgcca ccgccgccga gaccacgacg acggtggagg 360
 cgaagaagaa cgccgaggag gccgggaagg agaagctggc gcagcagagc tgatcgactg 420

tccgtgcatg

430

<210> 5519

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C4

<400> 5519

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tcctcgtgga gtcctatcgt cagcttcgag aagcgcgagc agttcgagga gcgcgccgag 120

accatcctcc acctgctcaa gctccagttc cccggcacgc cgcagtcgca gctcgacatc 180

tccaagatac agtacaacag ggacgtcggg tacgccctcc tggagagcta ctcgcgcggtg 240

ctcgagagcc tggcgtacag cgtcatgtcc cgcctcgagg acgtgctgag cgcggacgcg 300

gcggcgcaga acctgacggc gagcggaggc gcgcggcgag cgctggagtc gacgtcgggg 360

gagctgcccc cgggcgcgga agcttgacgc caaggaggag ctggagaagc tgaacg 416

<210> 5520

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C5

<400> 5520

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gtgccccgag gggaaagtgc cgctcatctc catcaacgcc ctgcaccagc tgcacatctt 120

catcttcgtc ctgcgcgtct tccacgtctc ctacagcgca atcaccatgg cgctcggcag 180

ggccaagata cgtgcatgga aagagtggga gaaagaagct gcaggacaag actacgagtt 240

ctcacatgac ccgacgcggt tcaggttcac ccacgagact tccttcgtga ggcagcatat 300

gaatgtgctg aacaagttcc cagcatcatt ctacatcagc aacttcttcc ggcagttctt 360

caggtccgtg aggcaggcag actactgcgc gctgcgccac agctttgtca acgtccatct 420

ggccccct 427

<210> 5521
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C6

<400> 5521

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tccgacgacg acgacgtgcc gccacatcca catggcggac gacgccgtcg ccggcgggagc 120
ggccgttctgc tgcgcagggc cggcgccggc ctcgctgtct tctagcagga agcagcagca 180
gcagcccgcg gacgccggct gcggcagcag cgacgaccac taccagcacg acgtgatcat 240
gctgaggcgg acgaggagcg ggcgggcggt cccgccgccg atctccgtga tcggcaaggg 300
cgggcgggccg tggctctgcc tgcgggcgca ccgcgagggt ggacgcctcg tgctgcggca 360
gatgcgcctg ccgtcgcagg agctgctgca gccc 394
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<210> 5522
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C7

<400> 5522

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ccacgtaçag cccgcacaag aagtgatgac ctaatagcat tggccgtcgg agctcggagg 120
ctgggggttca cggtcacggc ccagactgag ctactacact tctgctagta ctatatattg 180
ctacttgttg ctctctacag tgcgtgtctt tcggttcctt ctcgtcatct cgtgtgcaag 240
gcagaggagt gaattagtca cgctcctgcc agattctgcc tggctctgtg ataactctta 300
ctccactgct agttgttaca tatacttggtg cgtcatgtca tttctcgagg agatgactag 360
tgtttgtaacc tg 372
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<210> 5523
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C8

<400> 5523

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gactttgccc agcttctctt tgaaatgcaa tggaccattg ttaaccaggc cagagcatac 180

gcaagagcga tgaaggcgac cctcttcttc tcgagcgcca cgcacaacat caacgtgaac 240

aagatcttca agttcatcac ggccaagttc ttcgacctgc cgtggacggg ggagcgcaac 300

ctcaccatcg gcgagcccat catagacttc tgacgacctc ctcctctagc taagtaatta 360

tgcagcacac acgacgaccc ttgtcggtat gatgggttga cagggtcgtc gcctcttc 418

<210> 5524

<211> 404

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-034-Q1-E1-D1

<400> 5524

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ggcgtggggc gccccgcggg cgtgctcatc aacggcaagg gcggcaagga cctggaggcc 120

gcgcctgcct tcaccttcga ggccggcaag acgtaccgcc tccgcgtctg caacaccggg 180

atcaaggcgt cgctcaactt ccgcatccag ggccactaca tgaagctggg cgagctggan 240

ggctcccaca ccctgcagaa cacgtacgac tcgctcgacg tccacgtcgg ccaactgctc 300

tccgtgctcg tcggcgccga ccagaagccc ggcgactact acatggtggc ctccacgcgg 360

ttcatccacg acgccaagtc cgcgtccgcc gtcatccgct acgc 404

<210> 5525

<211> 263

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D10

<400> 5525

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caggaacata tcagtcgatac atggacggat tcgtaggcct cttgaaagtc cggggtaggg 120
 ggggcatcaa ccttgccataa cgcgacgcag gatgcagcga tccgtatgtc gtcctacgac 180
 ttggcaagaa gaaacttaag acgagcgtca agaagagatc tgtcaacccc atctggcacg 240
 aggagctaac cccgaccgtc aca 263

<210> 5526
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D11

<400> 5526

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 aatgcatctc catgagcgta ctcttggtgt tcttgccctgc cgttatgttg atgaagtcag 120
 ggttggtgca ccatgggaag tttaaagga catgatcact acgtttaaca ttccattggt 180
 tgtccatggg actgtagctg agggcaattc agctggtgaa attgatcctt atgctgttcc 240
 aaagagcatg gggattttcc agacaatcag gagcccaaaa tctataacaa cattgtcagt 300
 ggcgacaaga atagttgaca atcatgaagc ttacaagaag aggaacctga aaaagaaggc 360
 tagcgaagac cgttactaca cacaaaagaa attccttt 398

<210> 5527
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D2

<400> 5527

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 ttgtcgatcg gccgattgat tgattgatcg atcgatcgat cagtccaccg cggcaaggcc 180
 ggggagggag ccgtcgtcgg tggttcctgg cggttgcatg tatgcgggag gggagagccg 240
 gcccaatggt gggggcgag gcgagagcgc gctcaggcgg cggaggcagc ccggcccgtc 300
 cgctctccc gctgcgtcgt cgtccggcag gggagcggag gaggaaggcg gggaggagcg 360

tgggcgaggc cagaagcaac cgcggcgcaa gaagcagcag gggaggcgcg aggcggtggc 420
cagggcgatc cggggcgggc tgcc 444

<210> 5528
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D3

<400> 5528

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gcgagcgcca cgcggtatcgt gatctacatc caccggagga ggaaggggaa aaaagagagg 120
ctcaccgggt gattgccgtt gatgccgagg cgagcaaggc gagacgatcg gtacaattag 180
ctcataggcc tatgtaagtt aggatttttt tttttgcagg taaagaattg catagaggcg 240
tgtagatcat atagcgtaga tagatggcac tggtagccat gccgatgaag atcttttgtg 300
ctgaactaga acaaaattaa agaggatgca ttaagtcttg tgggtgtata aactagaggt 360
gtctatatgg tg 372

<210> 5529
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D4

<400> 5529

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tgggaggcgc gccgtcgggtg cccgctggcg cgctggacat cgcgcagctg ggcgccaagg 180
gcgacggcaa gtcggacagc accccgatgg tgctcaaggc gtggaagcac gcgtgcgagg 240
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tggtggggcc ctgcaagtcc tccatcatca tccgcctcga cggcaacctg ctcggcaccg 360
gcgacctcaa cgcgtacaag aggaactgga tcgagatcca gaacgtc 407

<210> 5530

<211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-D5

 <400> 5530

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 ggaaaagggt gtcagaccgt aactaagagc tatttagcaa taatacatat atagctatac 180
 cctcttttagg tcaagagggt ggagttctcc ttattcggag gaagagctcc atcctcattc 240
 tacaagacca aaccaataaa tggcctctag ccacacgtcc tcgccatcat cctccaagaa 300
 gtcgccgcca ccacaagaag catcagcttt ggcgccaaaa tcattctcaa agtcaccctc 360
 gccaccaaag ggtgaatcaa attcatctcc cagtcccga tcgaaatcgt ccctggtc 418

<210> 5531
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-D6

 <400> 5531

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 gtaattggat cgagattcta cgcgtggata acctggatcat caccggcaag ggaaaccttg 180
 acgggcaggg ccagccgtg tggagcaaga actcctgcac caagaagtac gactgcaaga 240
 tccttcccaa ctgctgggtg atggacttcg tgaacaacgg ggaggtgtcc ggggtcacgc 300
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 catccggga 429

<210> 5532
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D7

<400> 5532

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cgcggtgtcc ctccgcgccc tcgctgccgc cccgctcccc aagtccagcc ccgccacttc 180
ctgccccctc ttctgtctcc ttgcgcggc gctgccccga cgcctgtctc gcctccgtc 240
cgcaagccgc ctgccgtcg ccccgctcgc cgcctccgat tccgccttcg agtcctccgt 300
cggagttaac tacgcggagc ccgacgactc ggagaaggat aaggagggtg agttgttcgg 360
atcgggtgac gacgaggggg cgggtgagtt ggtggatgac cattccgtag acgtctcagc 420
cgctgt 426

<210> 5533

<211> 231

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D8

<400> 5533

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atctcggcgc gcaccgctgg ggatactccg ctggcaggcg gcggctgtgg agccctgaag 180
ccggacttct atagccagtc atgccgcgc gctgatcgga tcattgcgga g 231

<210> 5534

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D9

<400> 5534

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tggcggtggt cgtcgggtgtg gtcgccaccg tcacccgctc cggcaagaag gccggcgacg 120
gggtcacggt cccgggggag gcttcacttg ccacgtccgg caagtcggtc aagtcctgt 180

gcgcgcccac cctatacaag gagtcgtgcg agaagacact gtcccaggcc accaatggca 240
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 cggcggtcga gcagtccaag tcgatcggcg aggccaaggc cagcgactcc atgaccgaga 360
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<210> 5535
 <211> 430
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-034-Q1-E1-E1

<400> 5535

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 gctgccgcca cgccgggtgct gctcaacgtg tacgacctta cggccgcgaa cgattacctc 240
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 tttggagccc acgactaccc atccagtggg gtgtttgagg tggaatcaaa gagttgccct 360
 ggctttatct acagaagaac agtgtggcta ggcacaacag acatgtctca agaagaattc 420
 cgctcgttta 430

<210> 5536
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E11

<400> 5536

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 tggagcgtcc ggtccaacgt ctgggagcgg tactacctcg gggagcagtt ctacatcagc 180
 gtcattctcg cggcgcgggtc gctgcgcgac gagtacaaca tgcccgacaa cgccctccgc 240
 tgcggaagg tcgtgggggt gccgctgccg ccattcctacg cccccgcgcg ctaaagacga 300

cgaaggcgcc gttttcacct cgtgttctga ccatccagtc taactaatcc attcctgtgc 360
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<210> 5537
 <211> 61
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E12

<400> 5537

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 a 61

<210> 5538
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 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
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<400> 5538

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 cgaagcagcg gacgacgctg gtgttcacgt acgggacgct gaagcgcggc ttctccaacc 180
 accgcctcct ggaggagctc ttcgcgagcg gggacgcgtc gctggtgggc cccgcggtga 240
 cgtcggcgcg gctgccgctg gtgtgcgggc cgtaccgggt gccgttcctt ctgaacctcc 300
 ccggcgcccg cgccggggcg caccgcgtgc gcggggaggc gtacgcggtg acggcccgcg 360
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 <212> DNA
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<223> Clone ID: LIB148-034-Q1-E1-E3

<400> 5539

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agatctctcc gcgtcttctc gcccaacccc ctccaacaag taacattgac cgcaaacgga 180
tcacgtccg ctgcggtcaa tgtaattaat taagcttctg aatcatacat agcttggcaa 240
atgcctgagg gctagctagc tagacaaggt ccattgagct agcccctttg ggaagaaggg 300
agaggaatgg cgctggtggc ccgttgagcg aggaagaggc tattgagaac ccgtaacaa 360
gaattgccag cagcatctgg acaatcttgt taacagagtt ccaaaggttc aattccaagc 420
agatacaat 429

<210> 5540

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E4

<400> 5540

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ggagagcctc aaggcggggg atcatatcta ctctggagg gcggcggtggg tctacgcgca 180
tcacggaata tatgtgggcg atgataaggt gatccatttc acaagaggaa gaggacagga 240
ggtcggaaca ggaactgtcg tcgatattat tcttgtgagt tccaccccaa aacgaagcaa 300
cacgccttgc ccggtgtgca ccgacgaaac cagcgacagc agcacagaga cgaacggcgt 360
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<210> 5541

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E5

<400> 5541

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 cccccaggc aagaacatca cggccaccta tggcaaggac tggttggacg ctaaagcgac 180
 atggtatggc aagccgacgg gtgccgggtcc cgacgacaac ggtggcggct gcgggtacaa 240
 ggacgtgaac aagccccctt tcaatagcat gggcgcatgc ggcaacatcc ccatcttcaa 300
 ggatggtctg ggttgtgggt cctgcttcga gatcaagtgc gataagcctg tggagtgtc 360
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 cttcg 425

<210> 5542
 <211> 444
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-F1
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 gagcgggcgc gaagggacaa gggggcgtgg acaagctccg gtgaggacgg cgctgaatcg 180
 accttcgacc cttggctcgg ggaaacgcga gcacgcagcg actcggggaa gcgctgggga 240
 tcggaagcgc ggaccggcac ggggaatgtc gagcgaccgg cgacgacggg gaggccccag 300
 cgaccgggtg ggctgtgggc ggcggcgaat ctacccgccg aggtcgcgat aaacaatgtt 360
 atgtgcaagg ataatttct tactaagagc tgatttggtg attaggtatc ccaaggggat 420
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<210> 5543
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-F10
 <400> 5543

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tcgcatgtct ccatcaagaa cgtcaccttc cgcaacatct ccggcacgtc gtccacgccc 120
 ggggccgtca gcttgcctctg ctccgagacg cagccgtgca gcggcgtctc gctcatcgat 180
 gtcaacgtcg agtacgccgg caagaacaac aagaccatgg ctgtgtgcag caacgccaaag 240
 ggaaccgcca aggggaagcct ccaggccctg gattgcctcg tctgatcgat gaccttgcac 300
 ttgcatgcat tcttcttccg tttcactttt ccatattcta ttgcgttcca gccaaagcatc 360
 ttgtttcttt tatatatata tatatatata tatatgcatg gaaataaatt tatggggggg 420
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<210> 5544
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H6

<400> 5544

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 caacaagggg caggggcac cgtgcacca gtttggggag tgggacgtga agaaccggc 180
 cagtcgcgag ggcttcaccg tcatattcca gaaggccgc gacgacaaga agaccaccac 240
 cgccctggg gctgggaacg cgcgcgagg cattccgccc gccttcagga acggcgccgg 300
 cgacggcggg tacaggcccg acttcggcga cggcaaccag tacacgccgc ccaaaccgaa 360
 gaagtgggccc ttctgtggct gctgaatcga agctcgtg 399

<210> 5545
 <211> 259
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-040-Q1-E1-H7

<400> 5545

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 caccagcggg cgcataaaag cgggtggccag gccacgtggc gccatggcgg tgggcatgtc 180

cagccgggac gcgtgggcgg cggcgtagag cggggtcgcc gccggggctg cctcgtcag 240
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<210> 5546
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A10

<400> 5546

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 gccgtcgtcc tctccaacgt cccctcctcg ggcgccttg cctcctcgtc gtcgtctctg 180
 ctgcaccagt cgtctccgtc tgagagtgg actgagaccg acagtagcat cggagaatct 240
 tcttcgtcgt cgtcgtcggg agaggccggc gagaaggaga aggagaagga gcaggagatg 300
 gagaaggcgg tcgcggcgga gaaggctgcc cagcaggagc tgctcaagta cgccaaggag 360
 aagggcacgt tg 372

<210> 5547
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A12

<400> 5547

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 cgtctcctg cactgccatc cctagcgtat caataagcct agaggagaaa gaaaatatca 180
 atggggatgt tcccacgac acctcggccg caagcaacga ggaggaggcg ttgttcagt 240
 tcggagaatc caccaaggac gatggccatc gcttgacgat ggaatgtcc actctcgtct 300
 cctccagtag cccttcagc cgcaagaagc gcggggcggt cagcctcttc agggcgatgt 360
 tctgtcctt cggccggagc gacgacagca tgaagaaga 399

<210> 5548
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-041-Q1-E1-A2

 <400> 5548

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 caggtagcgg aggcaaagaa gaagagagcg gcggagagcg gcgaggcggc ggaggcgaag 180
 aagatccagg acgacttctg ctcgacgctg tgcgagggca agaaggggac ggacctggtc 240
 gtgtgcaagg agtctcgcgc gctctcccag cagtccaacc tgggtgctgta cggcaggatc 300
 cagtgcagg gcaagtgcac cgagcagaag ggcatacagg cgccggccat gaaggtctgc 360
 cangaggagt gcgacaaggc gtacgtggtg 390

<210> 5549
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-041-Q1-E1-A4

 <400> 5549

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 tgtgcanggc gcgagcgcgt tcgttcggca tggaacagaa cgccggctcg tcctcgcgcg 240
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 tcgtgggcgt gtccactgcg tggctcggtg aggggctttc atgcgtctgc gcgcagagga 360
 aggagagcga cgtgcgcctg tccttcgatt tgag 394

<210> 5550
 <211> 422
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
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<400> 5550

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gtccacttca tcgacctcct cacggccgac ggcgtcacct accataagac atgcttcaag 180
tgcagccact gcaaagggat cctctcgatg tgcagctact cttccatgga cgggtgtgctg 240
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acgccagggtg gcaagtcttc agacaagggt gaactganca ggggccccag caagctatca 360
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ga 422

<210> 5551
<211> 419
<212> DNA
<213> Zea mays

<223> unsure at all n locations
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<400> 5551

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gcgatggcgt accgtgtcct ggaggtcacc ctggtgtcgg caaatgacct caagaaagtg 180
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gtggtacact tccccatccc ggctgccgct gacaccgcg gcctcgact ccacgtgagg 360
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<210> 5552
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A9

<400> 5552

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gccgcgctct tgggtgctagc cctcgcgcta gtggcggcca ccgccccaca ggtagcggag 180

gcaaagaaga agagagcggc ggagagcggc gaggcggcgg aggcgaagaa gatccaggac 240

gacttctgct cgacgctgtg cgagggcaag aaggggacgg acctggctgt gtgcaaggag 300

tcttgcgcgc tctcccagca gtccaacctg gtgctgtacg gcaggatcca gtgcaagggc 360

aagtgcaccg agc 373

<210> 5553

<211> 407

<212> DNA

<213> Zea mays

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<400> 5553

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ctgtctgccg gttccagctg ccggccaccg acgacaaggg ctcatgcagc agcggcgacg 180

gtggttttgt cagtgtcgat gcggatgggtg aaggcaatga caacggcggc ggtgatggta 240

gggcaagtat tccaggcaat gcggagccag ccgaagccga agagaacggc agccgggttc 300

cgccatcctt gcagtggctc aacagcctgt tctcgccatc ggcgagtcct tccggtagcg 360

gcagcggcag ttcgcatcat tgggaagaat gagcaataat gcaatat 407

<210> 5554

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B2

<400> 5554

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cgcgcacacc cgcgccacgg acggcgcggc cgggcggtgt ccgtctcgac gcccgcggcg 300
cggagccggc cgttcgtctt ctccccgcgc gcggtgtccg actctaagag ctcccagacc 360
tgcctcgacc acgatgccag cacgagtgtt cttggaatca t 401

<210> 5555
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B3

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ctgacgggcg cgctggacct ggtgggcccc tgcaagtcct ccatcatcat ccgcctcgac 360
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<210> 5556
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B6

<400> 5556

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cgctgcgcag ggccggcgcc ggctcgtctg tcttctagca ggaagcagca gcagcagccc 180
gacgacgccg gctgcggcag cagcgacgac cactaccagc acgacgtgat catgctgagg 240
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ccgtggctct gcctgcgggc gcaccgcgag ggtggacgcc tcgtgctgcg gcagatgcgc 360
 ctgccgtcgc aggagctgct gcagccctg 389

<210> 5557
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B7

<400> 5557

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 atgcacggtg acatgcccc acaagaaagg gatgccatta tgggtgagtt caggtctggc 240
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 tcacttgatc taaattatga tctcccaaata aatcgtgagc ttacatcca tcgcattggt 360
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<210> 5558
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B8

<400> 5558

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 ctgcccgtcc attccgagga ctgctgggac gacaccgcg tcatctgcac caagacgcac 180
 aactgccggg acgacacttg cgcggggcgc ggcattgccg acggccgctg cactggggag 240
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 ctcggtattg ctacttcgc cggcgatgat ggatggtgcc caactgcgac tgcccagtct 360
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<210> 5559
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C1

<400> 5559

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atgagcattc ttgccacct aggagagaca ataggttagt aacctccaac ataattgcga 180
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agtcatttcc atgtgtgaag ccattagaaa gaaggttatg gtgaggatac aagagaataa 360
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<210> 5560
 <211> 406
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
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<400> 5560

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<210> 5561
 <211> 390
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C12

<400> 5561

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actacctttt tgcgttccgt atgttcatgg tgcttttttag gcgtgaagta tcatttggag 240

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cagcgtgtga agaacaaggt gcagtagata aaaacaaagt ttctaaatcc aaactgaaaag 360

gactgcgcca ttttgggcaa gtgggataat 390

<210> 5562

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C2

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atggctatcg ttttcaaggt cccctactgg gctataaatc cacgacagcg aggctgtggt 240

gcctttggct catgtgaatg atcaaacggg aaatgtcaat ttggttggtg ctagttgctg 300

gtccttttca tgtgacatct gccttcgtct agatgcgatg tttgtccttg gttcacatcg 360

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<210> 5563

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C5

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gcttgggaaa attgagctct cagactgcga aatttacgcg tcctgcgagc catgccaat 360
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<210> 5564

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C6

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gccttttggg gctgttcctc gcctgcatgg tcgccggcgg cgtgcagtac ggatgggcgc 180
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cagtcattgt gctctgtgga cctattgctg gcttacttgt acaaccctgc gtcggcctct 300
atagtgacaa atgcattctt aagcttggga gacggaggcc attcatcttt acaggatgca 360
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<210> 5565

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C7

<400> 5565

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cgtccgcgag gcaggtcgcg ttggcgggag aagcctcgcc gagagacctc ctccggatgc 120

gcggtggcggg gcgggagcgc gcgaggcggc ggcgtcgcga cccgggcccgc gacgagttct 180
tcgtgcccac gccagagtcg ctggcgtggc tcgactcggc ctcctccccc atgggtgctca 240
ccgccgccgc cgtggccctc ttcaccaagc tcctcatgat ggaacatgaa gctacagatc 300
aagaaaggag agagcgcaag ataaagaata gccaccctga tcaaggaaca gtaaggatgc 360
tatctcgtga agaatgggac gaggtccaag aa 392

<210> 5566
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C8

<400> 5566

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ctcatacttc ctgctactg ccttcgtttc tctttccaac aatcaagatg agccgtggcg 120
gtagcgcggg tgggtggtaa agttctctgg gttacctctt tggaagcggc gagcccccca 180
aaccagcagt ggcaccagct gtaagtgtc cacctgctgc tgcaggtgct ccacctgctg 240
agaaaccacc tgctgcaaag cctgatggca ccagtcagat tgctgctggg gttaccagcc 300
aaaccaataa ctaccacagg gccgacggc agaacaccgg aaacttcctt acggaccgtc 360
cttctcgaca gagtcaacgc tgctcct 387

<210> 5567
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C9

<400> 5567

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gccggtgctc caccggccc gcgtccacat cacggcgggc gggcgcgcg gtgaacgggt 180
tcctctccgc atgaccctgt gatggtcggg gggttcctgc ggcgcggcca cagcctcgac 240
aggctcctgt cgaggaggcg ccgggccgtt tcgcccagcc cctcgttctc gtccctcctc 300

tccacgccgt cgtctccgcg tggcagcagc gtcaggagcg gcatgatggc agaggacgac 360
gacgacgcgc ccaccaccgt ggcgggcgcca ccgc 394

<210> 5568
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D12

<400> 5568

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tggtttgtgc acaacccgc tcaccttcaa ggttggcaag ggatccaagc ctggccacct 180
gatcctcacc cccaatgttg caaccatata cgacgtggaa atcaaagagc acggggggcga 240
tgacttctcc tttaacgtca aggagggccc gaccggcacc tggacgctcg acaccaaggc 300
cccgtcaag tcccccttt gcatccgctt tgctgtcaag tccggtggct accgcatcgc 360
tgacgacgtc atccccgtg a 381

<210> 5569
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D2

<400> 5569

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acgagtcgcc cgccggcgac gtcccagaga aggagtcgtc cgccaacggc ttcaccctgg 180
tcgggctcag aaccatcgac atcgccaagt ccaccgtaga gggcatgtgc cccggcaagg 240
tctcgtgcgc agacatcctg gccttcgcgg cgcgcgacgc cgccgtggcc gcgggcctcc 300
cgagatacga ggtcgcgggc gggcgccgcg acggcatgcg ctcgaacatg gacgacctcc 360
cggggcaact tccccgtgcc gggccaccac gtgccgcgcc tcaccgagct cttcagccag 420
cgggggctct cc 432

<210> 5570
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-041-Q1-E1-D3

 <400> 5570

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 caggaggggtc atcccttcgg ataacagttg cctcttcaac gctgtgggct acgtgatgga 180
 gcacaaccga aataaggctt ctgagctcag acaggtcata gcagcaacag tcgctggtga 240
 tcctgagaaa ttcaatgaag tgtttcttgg caaaccaaat gaagcgtatt gtgcttggat 300
 tttggatcct gaaaagtggg gaggagccat tgagctctct attctatccg aatactacgg 360
 gcgtgaaatc gcagcatatg acattcagac cactcgctg 399

<210> 5571
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-041-Q1-E1-D4

 <400> 5571

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 ggagccgcgg cggtggcgga gatctgcatg aagactccgt ccccgacct gtgcaccagg 180
 acggcgggga agcacgcaa caagtacaag gtggtggacg cggtgacggt gctagagatg 240
 caggtggacg cgttcaagaa gcgcgtgaag gcggcgcgga ggctcgcaa ggaggaggtc 300
 aagacggccg cgacgcccga ggcgcggagg gcgctgaacc tctgcaagac ctactacctg 360
 gacgccgccg acaacctcgg cgctgcaag cgcgccatcg gcttccgcga cgccgtcacc 420
 atccgcgcc 429

<210> 5572
 <211> 405
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D5

<400> 5572

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gccggcctcc tcccgcaggc gctgggtaag ggtaggggat gcaggggaca cggtggcgcc 180
gtcaaccgcg aggtcgccgg catctgctct cgcaccccg tcccggaggt gtgcacgtcc 240
accgccgggc ggcacgcgtc gaagtaccgc gtcacgcaca acctggccgt gctgaacatg 300
caggtggacg cgttcgccaa ggcacccgcg caggcgcgca agcacgtcgc gacgtcggcc 360
cgcaccatcc cgccgcagca gacgcatgcg ctcacgttct gcgac 405

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<210> 5573

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D6

<400> 5573

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ccgtgctggt tcgccatgct agcgggtggc gccgatgtcg ccaacgccgg ccacgccaaag 120
cccctgacgc ctggcggggc cgtggtacac gacaaccacg gcaagttcac ggccggggccg 180
tggaacacct cccacgcgac cttctacggc gggcgggacg ggtccggcac cacggcgggc 240
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acggtgttgt ttggcgatgg cgcggcctgc ggcgggtgct acgaagtgcg gtgcgtggac 360
agccccagcg ggtgcaagcc cgacgcggcg gcgctggtgg tgacggcgaa acgactgtgc 420
ccgccca 427

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<210> 5574

<211> 281

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D7

<400> 5574

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tatcacttat tatgtagatg tacatgtgat ggattttgca ttgtggaact gttaaaatga 180

accgacatga gatgccaaat ctttgcacca aacagtatga tgtattgctg atctgatttt 240

tttgcacaa atgtatatct aatataccat attttttgc t 281

<210> 5575

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D8

<400> 5575

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cccctgacgc ctggcggggcg cgtggtacac gacaaccacg gcaagttcac ggccggggccg 180

tggaaccag ccacgcgcac cttctacggc gggcgggacg ggtccggcac cacggcgggc 240

gcgtgcgggt acaaggacac gcgcgcgcag gggtagcggc tgcagacggt ggccgtgagc 300

acggtgttgt ttggcgacgg cgcggcctgc ggcgggtgct acgaagtgcg gtgcgtggac 360

agccccagcg gggtgcaagc ccgaccggc ggcgctggtg gtgacggcga aacgactgtg 420

ccca 424

<210> 5576

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D9

<400> 5576

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acaagttgtg tactgccaac ggcgcctcca aggtcacctg caaggatgtc accttcaaga 120

acatcaccgg cacctcctcc acccgggagg ccgttagcct gctctgcact gccaaaggctcc 180

catgcaccgg cgtcaccatg gatgacgtca acgtcgagta tagcggcacc aacaacaaga 240
ccatggctat atgcacgaac gccaaagggca gcaccaaggg ttgcctcaag gagcttgcac 300
gcttctagac cctccatcga ctgacccatc tctctagtta taatttttct ctgcgtccttg 360
cattgccccat tagatgctat ccattggtaa cgcacaacag taaaacgaca gacat 415

<210> 5577

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E1

<400> 5577

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cggcttcttc cacgtgggtga acaacgacta cagcactgg atcatgtacg ccatcggcgg 120
caacatgaac cccaccatca tcagccaggg caaccgcttc atcgcccccg acgacgccaa 180
cgccaaggag gtgaccaagc gggagtagac gccgtacaag gactacaagg agtgggtgtg 240
gaagtcgcag ggcgacgtca tgatgaacgg cgccttcttc aacgagtccg gcggccagaa 300
cgagcgcaag tacgacaggt tcgacttcat cccggacaag cacggccgct acgtcgggtca 360
gctcacgcgc gtcgccggag cactcaagtg catcgtcggc taccgtgcta gtagacagc 419

<210> 5578

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E10

<400> 5578

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gccggcgcac gtcgccccgg ggctcacgct caccaccgag cccaaccaa ttaataatat 180
atatatatag ctaggatcga tcgtcagtaa aatggcaggc tccgccgtcc tgaggagccc 240
cctgtccgtc ctctctaca tctcgcgcgc cgtgccccgc accgccgcgg cgacgccgac 300
cgacgccgcc atcgacgagg cgtacgcgca tctcgtcaac ctcaccgcta accaggagta 360

<210> 5579
<211> 213
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E11

<400> 5579

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tttgtcagca cctgtgaaga tgtcaatcgt ctctgaatga tcaggacggt cctactcgcc 180
tagaacaggt acttgacta cgtgacgctc acc 213

<210> 5580
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E2

<400> 5580

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gcggagatct gcatgaagac tccgtcccc gacctgtgca ccaggacggc ggggaagcac 180
gccaacaagt acaaggtggt ggacgcggtg acggtgctag agatgcaggt ggacgcgttc 240
aagaagcgcg tgaaggcggc gcggaggctc gccaaggagg aggtcaagac ggccgcgacg 300
cccgaggcgc ggagggcgct gaacctctgc aagacctact acctggacgc cgccgacaac 360
ctcggcgctt gcaagcgcg cctcggcttc cgcga 395

<210> 5581
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E3

<400> 5581

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 cacttcgccc cggggctcac gtcacaacc gacccccaac caattaataa tatatatata 180
 tagctaggat cgatcgtcag taaaatggca ggctccgccg tcttgaggag cccctgtcc 240
 gtctctctct acatcctcgc cgccgtgccc gccaccgccg cggcgacgcc gaccgacgcc 300
 gccatcgacg aggcgtacgc gcatctcgtc aacctcaccc ctaaccagga gtactgggcg 360
 gagcgcgccg aggcggcgca cgcgtaaac cgcgcgccgt tacagaccga cc 412

<210> 5582

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E7

<400> 5582

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 aataaggtcc cgcccttttc cgacattcac aggggggaca ggaaatcagc ggccatggcc 120
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 tgccgcgccg ggttcgtgac caatgtcacc gagtacatcg cgggcgcca ggtgaggctg 300
 gagtgaagc acttcggcac cggaagctc gagcgctcca tcgacggggt gaccgacggg 360
 aacggcacgt acacgatcga gctcaaggac agccacgagg aagacat 407

<210> 5583

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E8

<400> 5583

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 agccacagcc cacagacaga cgacgtcagg tcttggcagg tgtgcaagca gacagagctc 180

gctcggtcgc catgtctttc accggcacgc aggacaagtg caaagcctgc gacaagacgg 240
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gcagccactg caagggcgctc ctctcgatta gcagctactc ttccatggac ggcgttctgt 360
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<210> 5584
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-041-Q1-E1-E9

<400> 5584

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agatctagcc ttctacaaaa gaagcaactc cgaacagcaa tggagctggc ctgggtctgt 180
tgcaacggag gattccgatg atttcgaggt tgcaactaat tgctcgtag agctggactg 240
cgtgaggcca tctagtgcgc caaaagcttc aggtttatca aatggagggg gcacagctgt 300
aaaaaagatc caagtcaagg gttcaaaagg ttcagacgtt aggggagtga atcctggaaa 360
aaggatcatc ccattacaga agaagccgag tggaccctca ncgacgctaa t 411

<210> 5585
<211> 94
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F11

<400> 5585

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cccaaattga gccacggag tcgacttttt aggc 94

<210> 5586
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F4

<400> 5586

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cctcctcggc gcatgcccgg agtactgctg tctcgtgtac gagtacatgg accacggcag 180

cctcgaggac cggtctgttc gtcggggcgg cagccgcgcg ctgcgtggg cccagcggtt 240

ccggatcgcg gcggagatcg cgacggcgct gctgttctg caccaaaca agccggagcc 300

gctggtgcac cgggacctga agccggccaa catcctgctg gaccgcaact acgtgagcaa 360

gatcagcgac gtcgggctgg cagcctggt gccgcgt 398

<210> 5587

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F5

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tacaaggaca cgcgcgcga ggggtatggc gtgcagacgg tggccgtgag caggtgctg 300

ttcggcgacg gcgcggcctg cggcgggtgc tacgatgtgc gctgcgtgga cagccccagc 360

gggtgcaagc ccacgcggc ggcgctggtg gtg 393

<210> 5588

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F6

<400> 5588

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tgatgggatt tgccaatgat gctttcgtag gatgcgcacg tggaagcaag caggtgaagg 120

gtttcatgtt tgaaaaaccc gttgatctga aagtaggtgt gaaccatgtt gtattgctgt 180
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 aggagtgcct aatccagggg ctgaacactg ggacgttggg ttacaagtc aatggctggg 300
 gccataaggc tgcactggaa ggtgaggaca aggagatcta ctcagaaaaa ggtgtgggca 360
 aagttcagtg gaaacctgcc gagaacggcc gggcagccac ttggtataag agatacttcg 420
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<210> 5589

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F8

<400> 5589

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 cgaggcggag gcataggtcg aggccgaggt ggaggtcgag gtggaggcgg aggccggtgc 360
 atcgtctgcg aagaagaagc gtatccaggt gtccagcaac a 401

<210> 5590

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F9

<400> 5590

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 gagcaggcat ggcgtcgcag gtcgtgggt caaccccggc ggtggcggcg cttgggttcc 180
 ttctcccgac cttctgggag atcgaggtca cgtgcgccgc cgcgatgata ctctggcg 240

tttacgttgc ctacgagctc ctcaaccgc gctcctcgca ggccggcagcg gcgggagcg 300
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 gcccctctgc ctatgtagtg aagctcgaat tggtggctgc aaaaaatttg atggcggcga 420
 acttaaattg gacat 435

<210> 5591
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-G1

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 gaactacaag gtgcttcccc ttatgtagtt accggcggtt ttactggaac tgtatacatg 180
 gcatagagtg cagaatagtg taaatgtaaa ctaggatgtt atcattatgt cttcacggtc 240
 acggtcattt cttgtcttca gctctgctgt ataagtttgg gaagagccta catgagatgt 300
 aaataatatt agagttaagc tgaaaataat gtatctccta atacaaagggt agttcagtgt 360
 caa 363

<210> 5592
 <211> 383
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-041-Q1-E1-G10

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 ccctccaaac tatcccagga cgggctcgac aagttaagg aattacacaa gaaacgggta 180
 cagataactg aaaagccgaa gtataaaaga aaactgaaag gaaccgctgg gagaagtacc 240
 aaagtaacca gtgattacaa attcactaat acggatgcat ctgctgatag ttctccaaga 300

gatgtacatc atacgtcatc aattacagga atccaagggg atcctgcac angcctgtcc 360
tcgangaaca aaagaaagct aca 383

<210> 5593
<211> 315
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-041-Q1-E1-G3

<400> 5593

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tccgcgtagt gcttggtgat cactttggcg gcgatgtttg gtggtgctat gtagcggttg 120
ccctcaagta ctgtgttggt gcattgttac acatcacagt acagtttggg caaatttttt 180
ttccacagag gaagtangga ttgatttaac cattgattta atcccacacg cgtgtatcta 240
cgtatacagt ttgtataaca tgaaccacct ctgtttgcga ttggtctaaa aataaatata 300
atacttatat attga 315

<210> 5594
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-G4

<400> 5594

gggtcgacc acgcgtccgc catgctcaac aacagccagc tcgcgaaaat aatgaagagc 60
cgcagcatgg catcatcggc cgcgctcttg gtgctagccc tcgcgctagt ggcggccacc 120
gccccacagg tagcggaggc aaagaagaag agagcggcgg agagcggcga ggcggcggag 180
gcgaagaaga tccaggacga cttctgctcg acgctgtgcg agggcaagaa ggggacggac 240
ctggctcgtg gcaaggagtc ctgcgcgctc tcccagcagt ccaacctggt gctgtacggc 300
aggatccagt gcaagggcaa gtgcaccgag cagaagggca tcacggcgcc ggccatgaag 360
gtctgccagg aggagtgcga caaggcgtac gtggtg 396

<210> 5595
<211> 344

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-B11

 <400> 5595

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 cgggggctcc cgcttcccc tgagggcggc gcgcgcgcgc agattgaccg cgggtgctggc 120
 ggttgcgcga gtcagaggaa tgtcccatcg tcatctggat ctagtaggag tgtcgtgcgc 180
 tccgagagca ggcattgtca tgatctcgca ccgggttcac tcggttctcc gtctcgggtca 240
 cccggggaca aatgacgtca ctggctggca agaggtgcgt tctgctgctg atcgagtcga 300
 ccgtctcgac gatatcagat cacacaacgg tgcaccaggc ttgt 344

<210> 5596
 <211> 212
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-B2

 <400> 5596

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 cctcaggcaa gccgaccgcc gacgtcagat cgcgccaacc cgagagaacg acggagatga 120
 tcaagaggat gcacatcgcc gcgctcctcg tagtcgccgt ctcggccgcc gcagtgccgg 180
 ccgccaatga ggccacagcg accggagcga cg 212

<210> 5597
 <211> 338
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-B3

 <400> 5597

 acaacacct atagtgagtc gtattactga cagcgaacaa tgatgccaca actgcgtagc 60
 ctcgtcgcgc tggatcatcg ggccacggcc ataaccgccg cgggcggcgt cgcgttaggc 120
 ttcacctta gcacgcctg caagcaactg tcacaccggc ttagagagac acctatctca 180
 agctaacggg cgctcgattg tgaacatcga gtgcgggaaa ttccagtcgt aacagtccat 240

aatcacgttg aagcaaatac cggtttcggc agctgggtata agatcgaaat ggcccgcgaac 300
catcaccatt acatccgcga cctcagcctg aacaggaa 338

<210> 5598
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-B8

<400> 5598

acacgcgtct gaggaagaca tccgcaacgg gaacgtcgtc cgcaacgtcc gccccggcgg 60
cacgggaaac tgctctgccg acgaaagcca catcatctgg gacaaaggcc acgtcctgca 120
agacctcttc ctcaagggtcc ggaacgtcca ctccggcgtc gtccaactgc aactcagatg 180
ggtcgccacc ccacctgaag cagactgaac tggaggagac gaactgcagt atgtacgtgc 240
tctcgctcca tatccccatg ggaagaacgt acggattcgc tcgctgtacg atgatactat 300
gcgatgcatg catgctcaag agtcaagatg tcaactgtctt ctgtgtattt tagtacagcc 360
acgtacattg tcgccatcca tcatcactat gcatggactt tttttt 406

<210> 5599
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C1

<400> 5599

gggtcgaccc acgcgtccaa agaactttca aggtggagca tcttcaaaca agaacgacca 60
ggcaaaggct ccaagcaagc tatcatctgc attctctgga actcaagata aatgcgcggc 120
ctgccagaaa acagtgtatc cattggagaa gatgactctg gaaggcgaat cctaccacaa 180
gagctgcttc aaatgctcgc acgggggctg catcctcacc acgtcctcct acgccgcgct 240
caacgggggtc ctctactgca agatccattt ctgcagctg ttcaaggaga agggcagcta 300
caaccacctc atcgagacgg cgcagaccaa gaagaacgag gccgcggagg ccggaccgga 360
gccaccggcg gacgcaggcg ctgctgagcc ggaagcacc gcgcaat 407

<210> 5600
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C11

<400> 5600

tcccgggtcg acccacgcgt ctagggaaac accttgaaga cgggcgcacg cttgccgact 60
acaacatcca gaaggagagc accctccact tgggtgctgcg cctcagggga ggcattgcaga 120
tcttcgtgaa gaccctgacc ggcaagacta tcacccttga ggtggagtct tcagacacca 180
tcgacaacgt caaggccaag atccaggaca aggagggcat cccaccggac cagcagcggt 240
tgatcttcgc tggcaagcag ctggaggatg gccgcaccct tgcggattac aacatccaga 300
aggagagcac cctccacctg gtgctccgtc tcaggggtgg catgcagatc tttgtgaaga 360
cactcactgg caagacaatc acccttgagg tggagtcttc ggataccatt gacaatg 417

<210> 5601
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C12

<400> 5601

gggtcgaccc acgcgtctac acacgcgcct ggcagaggcg cagagacagg cgtcttcgta 60
ctcgcctatc tccgcgactc aaagcttctt ccatttccta ccgccgccgc tgcagctcca 120
ccccattccg tcgacaccat gagggagtgc atctcgatcc acatcggcca agccggtatc 180
caggtcggaa acgcgtgctg ggagctctac tgcctcgagc atggcattca ggctgatggt 240
cagatgcccg gtgacaagac cattgggggt ggtgatgatg ctttcaacac cttcttcagt 300
gagactggtg ctgggaagca cgtccctcgt gctgtttttg ttgacctga accaactgtc 360
atcgatgagg tgaggactgg cacctaccgc cagctctttc accctgagca gcttatc 417

<210> 5602
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C4

<400> 5602

ccgggtcgac ccacgcgtcc acttttcac acatgatatt agaagtgtaa tctatggaga 60

acaaccaaga aataggttgg atttgtagat acccaaagat aatagcaa at caagtcacgt 120

tgtggcattc gtaactgggtg gagcttggat cattgggttac aaggcttggg gtgctctcct 180

tggaaggcgg ttagcagaga gaggaattat agtagcttgt attgattaca gaaatttccc 240

tcaaggaaca ataagcgaca tggtcagtga tgcttctgag gcgatatcat tcatttgtaa 300

caatgttgtt agctttggag gggatcctaa taaaatctac ttgatgggcc aatcagcagg 360

agcacatatc gcggcctgcg ctctcttaga gcaagcaatt aaggaatcta agggagagaa 420

tacctattgg aatg 434

<210> 5603

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C5

<400> 5603

atagtgaagc gtattacggg aggtgcattg ctccgggtgg ccaccatggc gcatcgagcg 60

gtggccacga tgacgactaa taagccctc ctctctctcg ccctggcgtc cgcgctcctt 120

ggcgccggcg cgcccgccgc gaacgcgccc ggcggggcgt tcagcaactg ggtggcgatg 180

aaccagcata gctacgcgct gtacgcgcag aactccgtcg gggactgggg caaggagccc 240

ctggacaaca agctgtctga ggcggaaaag aagaaggcca cctacgtggg ggaccctagc 300

ggcaagggcg actacacgat catcagcgcg gcgctggagg atatcccggt gagcagcagc 360

aagcgctga atctggatct c 381

<210> 5604

<211> 226

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C7

<400> 5604

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cgacgacgag gccgccaacc agttcttgaa ggcgacgttc cagctggcca ggaggcggtg 120
aggccacggc catagcttga cttgaaggag cagcaaagat ccttacgcgt cccgcgcccc 180
gcggccccgat tgatgaaatg atgtgcgtgg tgtttcgcac ttttct 226

<210> 5605
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C8

<400> 5605

atagtgaagtc gtattaatcg tcggagcaca cagagacttc ctgcctcca tcgcatcacg 60
ccgacgacgt cgctacggtc gctaacaagc cgccgcatcc agggatggag atgaagaaga 120
tcggctgcgc cgtcctcgtc gccgcctcgg ccaccgtggc tctggacgcg gaggtgccgg 180
ctcagtccca cagcagcggc tccgcggctg tcgcatccga catcgtcggg gccgccgtgg 240
tctccgtcgt cgggtacaac agatactgac tcgccggacc atgagtcgga ctgccggacg 300
gaacaaacca atgggggggag agacttggat gcgctgtcct gctctgccgc cctggcgag 360
tccc 364

<210> 5606
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D11

<400> 5606

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cctccccgag gccagcagca tggccaacgt ccgggagatg atctgcaacg tcgaccgcga 120
cagcgacggc cgcgtcgact tcaacgagtt caagtgcag atgcagggga tcaccgtctg 180
gggcgcctga ctgacctcat cgtcgtaccg cgtacgttct gacttctgag tgtgtggcaa 240
ctggcatgat ggtccccgca tttcgtcgag acagtcctgc gtctgcgtct ctaattgaat 300
tctttagtat cgtccttcac atcactggtc tagtggtgat gagaatgcc tgtcctgtgt 360
gtgtgtgtca cataaccatg gtatgtaatg tcatactggg aattaggtat atgatgatga 420

cagctgataa gaaaatg

437

<210> 5607

<211> 433

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-048-Q1-E1-D4

<400> 5607

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ccaaggacac ggccacgatg gaggcgatcg ggaacgggtt cctgatgcgc gggatcggcg 120

tgaagaacac ggcgaggagcc aagaaccacc aggcggtggc gctgcgggtg cagagcgaca 180

tgtcggcggt ctacgagtgc cggttcgacg ggtaccagga cacgctgtac acgcacacga 240

gccgccagta ctaccgcgac tgcgtcatca cgggcacat cgacttcac ttcggcaacg 300

cgcaggtggt gttccagaac tgcctcatcc aggtgcgcaa gtgcatggac aaccagcaga 360

acatcgtcac ggcgagggc cgcaaggaga ggcngtcgtt gggcggcacc gtcatccaca 420

actgcaccgt cgc 433

<210> 5608

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D6

<400> 5608

tacaacaccc tatagtgagt cgtattagtt tgatcccgac ggaggtttgc acactagaag 60

cgctcttttt ctcgattttg atgagaagca tgttggcagg aaaaaaacat cggcccttgc 120

cttgtttgtg catgcgatcg agatccatgc atgcatatga gagagacttg catgatggac 180

gatcttacag gagaccgagt atggagccct tgatgatgcc gttgacgctt gagatggtgg 240

cgactcagca ttcttgcaact cgccagttct tgcgtccgga cggcagtacc ggggatacac 300

gcctatttct actctcaatg gagcatctac ttctctctgt attgttattg ttttgcgagc 360

agaattgctg atatcgtggt gtaacacagt gg 392

<210> 5609
 <211> 389
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-D7

 <400> 5609

 tcgctgtcca ttacaacacc ctatagttag tcgtattaca cagataataa ggaaagggtcc 60
 cgcccttttc ctccgacatc cacagggggg aggggaaaac acgtgcattc acccggcggc 120
 aataatggcc tcggttccgg ctccggcgac gacgaccgcc gccgtaatcc tatgcctatg 180
 cgtcgtcctc tcctgtgccg cggctgacga cccaacctc cccgactacg tcatccaggg 240
 ccgcatgtac tgcgacacct gccgcgccgg gttegtgacc aacgtcaccg agtacatctc 300
 cggcgcaaca gtcaggctgg agtgcacgca ctteggcacc ggcaacctcg agcgcgccat 360
 cgacagggtc accgaatcga tcagcacct 389

<210> 5610
 <211> 82
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-D8

 <400> 5610

 cctatagtga gtcgtattat acaagtcgag tcagtagggg gcgtcctttt caggtgggct 60
 ccacatcggc gatcggtaac gg 82

<210> 5611
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-D9

 <400> 5611

 gggtcgacac acgcgtctac aattacttat accagttcct accatgcact ttattctgct 60
 ttccggttct caacgtcttg gacatcgccg gcgagcacag tctcctcggc aacttcttct 120
 actgctaact cgggtgcaag gcaaggaaac tcggtatcgt cagagatatc ttgatctaata 180

ggtaaaccat gaagtgagggc atatcttcaa gacacgatct aaagttgtct cgtttatccg 240
 gaagtttctt gatgaccgtg aatttttgga ggtggagact ccgatgatga acatgattgc 300
 tgggtggagca gctgcaaggc cttttattac acatcacaat gaattaaata tgaggctttt 360
 tatgcacatt gctcctgaat tatatctgaa ggaattgggt gttgggtggat tggaccgtg 419

<210> 5612
 <211> 377
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E10

<400> 5612

taatctgac gcgggtggcgc ggaccggtcc gccagtgtag tgttcactag taaacacggt 60
 acagcatgca tacaccagga ctgtctggtg taaataaatg ttaagataaa agtatatata 120
 actcccatta caatgattgt tttttaaac ccattacagt gatttgagag ggcattctca 180
 gattacatca atagatatat ccgtgcgttc tcatttggtc cccccccacc caacgtccct 240
 tctcccttcc ctaagcttcc ttcgtctttg ttctttttga tgattttatt tcgccgagca 300
 gcacaggaat ggattagtta gactggatgg tcagaacacg atgtgaaaac ggcgcttcg 360
 tcgtctttag cgcgcg 377

<210> 5613
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E12

<400> 5613

ccgggtcgac ccacgcgtcc agaacagccc ccgcgtcgtc ctccgctcgg gcgacacggg 60
 aggcccccca gccctagcgc cgccactctc tctctctcta tttccccct cgccgctcgc 120
 agaggagact gccgaaggcc ggcgcgacct ccaaagatgg cggctacggg gcgtttctcc 180
 ggcatttctc ctctgtttgg tcttccgatg ctcatatctg agcgggttct gtgccgggcg 240
 gttcaagttc cagccgcggg gttgctgggg cgggcgtcgt cccccacgcc gtcgtcttcc 300
 ttgtccccgg cgtcgtcggg gggctgtgct cgggtggtca acatctggtc ctgcaggtgc 360

atccaggtga tggattggcg gcactactg gtgggtggcg ggctgcgccg tttcggcggc 420
 ggacacatgg cgtgggtgggc 440

<210> 5614
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E4

<400> 5614

gggtcggccc acgcgtccac ggcacgcagg acaagtgcgc ggagtgcgac aagaccgtcc 60
 acttcacga cctcctcacg gccgacggcg tcacctacca taagacatgc ttcaagtgca 120
 gccactgcaa agggatcctc tcgatgtgca gctactcttc catggacggt gtgctgtact 180
 gcaagaccca cttcgagcag ctcttcaagg agaccgggag cttctccaag aacttcacgc 240
 caggtggcaa gtcttcagac aaggggtgaac tgacaagggc cccagcaag ctatcatctg 300
 cgttttctgg tactcaggat aagtgtgcag cttgccagaa aacagtgtac ccgctggaga 360
 agttaactct ggaaggcgag tcttaccaca agagctgctt caagtgtctg cacgggggct 420
 gcacct 427

<210> 5615
 <211> 180
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E5

<400> 5615

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 tatgcaaag agagcaagca gtcttcaacg gtgcatatca gatcggaggg atggtacgga 120
 gtacgggtta cacggagctt cgtcagcttc ttgataagca ccaggcgga gtgtctggcc 180

<210> 5616
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E6

<400> 5616

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tggcgaccgg cgtggcgteg gccttcttcg cgtccctcga gcgctgctcc tgcattccacc 180

tccacaccgc ggaggacgac tgcgacgagg atgaggacga cctcgaggag gcccgccgct 240

ccttctcccg cccgatccct gagtactact acgaccggtc cggctcctcc gcctccgtec 300

ccacgatgtg acctgaccga accgcgcctc cctccgccc tgaaatgcgt ggtgatacta 360

tccgtttctt gatcgatt 378

<210> 5617

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E7

<400> 5617

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cgcgccctgg agcgcggcga gctgcaggac atgctggacc ccgccgtgcc cgactggccc 120

ctggaggacg cgcagtgcct cgccgagatg gcgctccggt gctgcgagct gcgccgaag 180

gaccggccgg acctcggcgc cgtcgtgctc ccggagctca accggctgca cgcgctcggc 240

gaggacaaca tgcagtactg cggcgccatc agcaggggtg gcggcagcgg cggcggcattg 300

cacagctcgt cgcggttcca cagcaacatc tcacggtcac acgccgagat gatgatccat 360

tctcagtacc caagatcagt gttcagctca agagcgggga attcgcccag 410

<210> 5618

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F12

<400> 5618

ttttcattac aacaccctat agtgagtcgt attagaatat acagttcgtg aatccctgaa 60

gcgtgcatat atatattcct gccaaagataa aggtaatgga atcgtcacgc aggttccagc 120

cggccgcat cctgcttctc ctgctcattg tgtccaccga tatggcatat gcaaggggaat 180
 gcgagaagta cagtgagega tttgttgggg catgcatgat cgcagacaac tgcgccaatg 240
 tgtgccgcgg tgagggcttc ttggccggca ggtgcagcac cttccgccgc cgctgcatct 300
 gcactaggca ctgctaaaca agatcgctcg atcgcttgcc atgcatcgac aacctattct 360
 taataacgtt cattatctcg ttcttattta tgacgaatgt catgtatgtt ctggtgactg 420
 tcatgtatat tctga 435

<210> 5619
 <211> 439
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-048-Q1-E1-F5

<400> 5619
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 acgtcggtga cgaggcgcag tccaagaggg gtatcctgac cctcaagtac cccatcgagc 120
 acgggatcgt cagcaactgg gacgacatgg agaagatctg gcatcacacc ttctacaacg 180
 agctccgcgt ggctcccgag gagcaccctg tctctctcac cgaggcgccc ctgaacccca 240
 aggctaacag ggagaagatg acccagatca tgttcgagac cttcaacacc cccgctatgt 300
 acgtcgccat ccaggccgtg ctctctctgt atgccagtgg ccgtaccaca ggtatcgtgc 360
 tcgactcggg agatggtgtg agccacaccg tcnccatcta cgaaggatac gccctcnccc 420
 acgccatcct tcgccttga 439

<210> 5620
 <211> 400
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-048-Q1-E1-F6

<400> 5620
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 aagaggggta gcctgaccct caagtacccc atcgagcacg ggatcgtcag caactgggac 120

gacatggaga agatctggca tcacaccttc tacaacgagc tccgcgtggc tcccgaggag 180
 caccctgccc tctcaccga ggcgcccctg aacccaagg ctaacaggga gaagatgacc 240
 cagatcatgt tcgagacctt caacaccccc gctatgtacg tcgccatcca ggccgtgctc 300
 tctctgtatg ccagtggccg taccacaggt atcgtgctcg actcgggaga tgggtgtgagc 360
 cacaccgccc ccatctacga gggatacgcc ctccccagg 400

<210> 5621
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F7

<400> 5621

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 tggcttggtg gaaggaactg agcgtctgag ccaactaaga cagacagctg aacggatggg 120
 ccagctatcc actcagccat atgggtcaaaa tcgaccaact cttgatgcat taatctgact 180
 gccacacatt ttttaciaag ttgttttgcc ttcacgtacc cttcgcaata acaccatgtg 240
 ttgtcactgg tttcttctgt aaccttaaca ttgggtttta aggctcaaac ccaacgaaac 300
 atgagaactt ggtggtctat ggtttcgtct gtaaccttat cgttgggttt taaggctcaa 360
 acccagccga aacatgagaa cttggtggtt ttaacgataa atcaccaaac ctctacagg 419

<210> 5622
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G1

<400> 5622

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 agggcccagc tgaggccgcc gtctccacac ccaagggtgc gcccgaggcc actccaatct 180
 ccgttgaggt tgcggctgat gaacaggtag ctgagaaggt ggtggtggag gagccggctg 240
 cggcgccga cgttgagcat cagaaggcta atgaggtggt cgctccagag gcggccgctg 300

ccgagcccga tcacaaggag gaggaagccg tggagaagac cgtcgtcgcg gagggagaagc 360
cagcggcagc cgccaatgca gaggaaaagg tgcgccaccgc cgccgagacc acgacga 417

<210> 5623
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G10

<400> 5623

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cccgcccttt tccgacattc acagggggga caggaaatca gcggccatgg cctcgattcc 120
ggcgacgacc ttcgccgtca tcttatccgt cctcttctgt gccgcggctg gcaccgccgt 180
cgacaacgac ctccccgact acgtcatcca gggccgcgtc tattgcgaca cctgccgcgc 240
cgggttcgtg accaatgtca ccgagtacat cgcggggcgc aaggtgaggc tggagtgcaa 300
gcacttcggc accggcaagc tcgagcgctc catcgacggg gtgaccgacg ggaacggcac 360
gtacacgatc gagctcaagg acagccacga tgaggacatc tgcgacgtgg tcttggtgga 420
g 421

<210> 5624
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G12

<400> 5624

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accggagcaa cgacgagaaa gcatccatgg ctgcctgtgt gggttccctg tgtgcgcgtc 120
cgccggcgcc gccatggcgg cgtccgcctt ctcttcgtg ggcattggact ccattctcca 180
tccccatgat tcccttcttc gcctgctgtt gaagatcatt cctgccacaa cgccagagga 240
gaacaggagg aggaatccac agcccaggta tgctagaaat cccccagact agctgccgct 300
ggatccggtc gatggcccct cgccctccac ctccaggctg catgcgcgtg ttcattgcct 360
gttgtctcaa gtgtaaaagt gtgcccttcc ttcattgtcg cgatcccctt cccacacga 420

tccacttccc caatccctgc gcc

443

<210> 5625

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G2

<400> 5625

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cacccgctcg gagagtcgga gcccggcggc cggagggcga cgtcgtccct aataaatact 120

aataatttat cactatacat aaccaatata taagccatgg gcaagcgcag cgtccctcgg 180

taccctgagg acgaggacaa aggcggctgc tgcggctgcc tgtgctggtg ctgctgcttc 240

ctgtttgttca tcgtggcggc gctggcggc acggccgcct acttcttctt cgtgtacaag 300

cccaaggcgc cgtcctactc cgtgagcaac atgtccgtct cgcagttcga cttcagcacc 360

tccgacctga cgctgtacgt caagctcacc gcctccgtgc gcgccgagaa ccccaacg 418

<210> 5626

<211> 237

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G3

<400> 5626

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tcgggctcgc cgcgggctct gacgacgatg aggacggcgg tcgtataagg aagccccatt 120

tcaactatgg taagttaa gggatccgt ggaccgaagg gcaggctact tcacaatgcg 180

ggcgtcactc gttaacacaa cctactgagc gaggctcatg gtgtgatgcc gaccatc 237

<210> 5627

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G4

<400> 5627

<210> 5630
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G7

<400> 5630

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attcagcgcga gcgcaggtgt gaaggaaggg ggacgcggag gaagatgggg ctccgcgttcg 120
ggaagctctt cagccgggtc ttcgccaaaga aggagatgcg gatcctcatg gtcggcctcg 180
acgccgccgg taaaaccacc atcctctaca agctcaagct cggcgagatc gtcaccacca 240
tccccaccat cggtttcaat gttgaaactg ttgagtacaa gaacattagc ttcactgtct 300
gggatgtcgg gggtcaggac aagatcagac ctctttggag gcattacttc cagaacaccc 360
agtgtcttat ctttgttgtg gacagcaatg accgtgaccg tgttgttgaa gccagagatg 420
agctccaca 429

<210> 5631
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G8

<400> 5631

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tgaaatcagt cacttcaatc gtcgatgggc taaagaaatc gtacattgag aagttgaggc 120
ccttggaanaa aacctatcag ttccatgact tcgtgtctcc cttgctgact agcagcgatt 180
tcgatgcgaa gccaatggtc atgctgttgg gtcaatactc cacggggaaa acaacattca 240
taaagcattt actaaaaaca agttatccag gcgctcatat tgggccagag cctacaacgg 300
acaggtttgt tgtcatcact tctggaccag acgaaagatg cattcctgga aacaccatcg 360
ccgtccaagc tgacatgcca tacagtggcc tgtcatcggt cggaacagca tttttgtcca 420
agttcgaatg t 431

<210> 5632

<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G9

<400> 5632

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tcgcgttcgg cgacgccacg cgggacatca tcaccaccaa cctcggagcc ggggtggctgt 120
cggccgccgt gcagctgggg ctctgcatca aectcttctt caccatgccg gtgatgatga 180
accccggtga cgaggtcgcc gagcgccctgc tccacggcaa gcggtactgc tgggtggctta 240
gggtggctgct ggtcgctcgtc gtcggactcg ccgccatgta cgtgcccac ttcacggact 300
tcctggcgct cgtcggggagc agtgtctgcg tcctcctcgg gttcgtgctg ccggcctcgt 360
tccacctcaa ggtattcggc gccgagatgg aatggcccgg agtgctgtcc gatgtcctgc 420
tggtcgtg 428

<210> 5633
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H1

<400> 5633

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tacgacctcc tcgtgcgggg gctggacggc gccgacaatt tcaatggggg tgtgagcggc 120
ccctctgcct atgtactgaa gctcgaattg ttggctgcaa aaaatttgat ggcggttaac 180
ttaaatggga catctgaccc atatgcattg atcacttggt gtgcagagaa gcgtttcagc 240
tccatgggtc ctgggtcaag atacccaatg tggggagagg aattcaattt ttttgttgat 300
agtcttctcg taaagataaa tgtcacgata tatgactggg acattgtatg gaaaagcaca 360
atccttggtc cttttactgt tactgttgaa tctgaggt 398

<210> 5634
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H10

<400> 5634

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ccgcccctcc cccacgctgg ccgcacccga caggggggtgc gcggcgctcg cgcaccaacgg 120
ggccggggccc cggcggcgcc ggtggggcgc ggcgcggtac ccgcgggtaca gcgaggcgctc 180
cacctcgggt ctgccgccgc cgcgcgccgc gccgcacgag gcggcggtgag cgtcgtcttg 240
gggcaagagg cgacggcgca aggtggcgcc ggcgcccaag gaaccggctg aggaggggac 300
cgccgcgctg ctcccgatgc ccggctcgcg cagcttcagg tactactggc agaagaagac 360
ggccgcccgc gacaggatcg tggacggagc cgacgcc 397

<210> 5635

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H11

<400> 5635

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gagaagccca tggacctgaa gaagggcgctg aaccacgctc ccgtcttggc atcgctcgatg 120
ggaatgacgg acagtggcgc ttacatggag caccgtcttg ccggcggtgga caggggtgcag 180
atcacggggc tgaacgcggg cacgctggac ctgacgaata acggctgggg ccacatcgctc 240
ggcctcgtcg gcgagaagaa gcagatctac accgacaagg gcatgggcag cgtcacctgg 300
aagccggccg tgaacgacag gccgctcacc tggtaacaaga ggcacttcga catgccgtct 360
ggagaggacc cggtcgtgct ggacatgagc acgatgggc 399

<210> 5636

<211> 132

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H12

<400> 5636

atagtgagtc gtattaaacc tcacgacgct ccattgtgag ttgcacgtac agggcccgctc 60

ccaattggcc aaaactgtta cgtcgctca gttcattggc acgtcgaatc gcaagttcgg 120
gactgagagg tt 132

<210> 5637
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H3

<400> 5637

caacactcta cagtgagtcg tatgtatggg tactccgcgc gccttctctt tctctcccg 60
acgtcgatcg tgttcttcag cacgggctag ctagctccct cgctctcagc catggcgacg 120
ccggacaaca atgggcacgg gcatccgctg cacaagtttg gggagtggga cgtgaagaat 180
ccggccacgt ccgagggcct caccgtcata ttccagaagg cccgcgacga caagaagacc 240
accaccggcc ctggggctgg gaacgcgcgc gcaggcattc cgccggcctt caagaacggc 300
ggcgggcgact gcgggtacag gcccgaattc ggcgacggca accagtacac gccgccccaa 360
cggaagaagt gggccttctg tggctgctga atcgaagctc gctg 404

<210> 5638
<211> 121
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H5

<400> 5638

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cgccgctgcc gtcctaagg acgctctaac gaccacgcac cgagtgaggg atattcaggg 120
g 121

<210> 5639
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H8

<400> 5639

ggctgaccca cgcgtccgag gaggcattcac cgtgaagaag acagggcagg cactcgtggt 60
 tggcatctac gacgagccga tgacgcctgg gcagtgaac atggtggtgg aaaggctggg 120
 cgactacctg cttgaacagg gcatgtaact actacgtacc agctggaatg catgtcgacg 180
 acgatggttt cgagtttcga cttccaataa tagtaacaac aaagcaaagg ctttctctcc 240
 ggcgtatttg ctttggtctt tctctccac gccataagat atctagcaat tggtgactcg 300
 ccttaattag ttcgctttgc ttttgaggtt gactcgacca ttttgctgta gcgtgaattg 360
 catggacatg caacgctcca atggcctttg gaatgtggaa ttttttccc gtttctgtaa 420
 ttttcctata aaat 434

<210> 5640
 <211> 329
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H9

<400> 5640
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 tgccgatgcg ggtgatggag tccgactcca tcgcctctgt gaagctccgc gtggagacgt 180
 ctcggggcgt gaaggcgcgc aagcagaagc tcgtcttcgg cgggcgcgag ctggatcgcg 240
 aggaacggcg catcctgtac tacggtatgg cggacggcaa ggttgtgcac ctggacatcc 300
 gcgctccgga cgtgcgtctc atcatcgtg 329

<210> 5641
 <211> 502
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-049-Q1-E1-A1

<400> 5641
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 gtgaaactcg cgggtcgccg tgggctcctt cttccccgcc ccactccgaa cagtgtccca 120
 tcgactgcgt agggtaatcg aatcgtggca ccatggcggg catagctggg actgcacacc 180

gaagaagaat gccgccgccg tggattcacg acctggatgt cgctccggtc tcggcttgcg 240
gttgggaacc ttcgtcaggg tgctctggtg ctctggtttt cctcggcggg cgcgattggt 300
gtccagatcc ctgcgaattt ctgccagag tccaactccg cagtggagcc gcagctcacc 360
gtggacagct cccctggcgc catctctgtc ttggcgcggtg gacacgtgtc atctgaaaag 420
caagttggta cctggaatct caagtgccag gagaagagca ggtggttcaa gangagccac 480
aaagcgagga gtatgatctg at 502

<210> 5642

<211> 486

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A10

<400> 5642

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attggcgctg gtgacgactg catctccatc ggccccggga cctccaaggt gaacatcacc 120
ggcgtgacct gcggccctgg ccacggcatc agcatcgga gcctagggcg gtacaaggac 180
gagaaggacg tcacggacat caacgtcaag gattgcactc ttaagaagac gatgttcggc 240
gtccgcatca aggcgtacga ggacgccgcc tccgtgtca ccgtctccaa gatccactac 300
gagaatatca agatggagga ctacgccaac cccatcttca tcgacatgaa gtactgcccc 360
aacaagttgt gtactgcca aaggcgcctc aaggtcaccg tcaaggatgt caccttcaag 420
aacatcaccg gcacctctc cccccggaa gccgttagcc tgctctgcac tgccaaagtc 480
ccatgc 486

<210> 5643

<211> 493

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A11

<400> 5643

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gacttcacca acggcaacgg cacggggggc gagtccatct acggcagcac catcttctcc 120

gacgagaact tcaagcacac ccacgctaaa gccggtacgc tgtccatggc taactacggg 180
 cccgactcca atggtcccca gttcttcac accaccgtag acgaaaaccg gttgccaag 240
 aagctggacg ggcgccacgt ggtgttcggc aaggtggtga aagggatgga cgtcgtgcgc 300
 aagatcgaag ccgagggcca gctcaccggc gtgccaagg ccaaggtcgt catagccaac 360
 agcggccagc tgccagcgcc cgccgccgcc ggccatcgtg acctctgac gatgacgagg 420
 agaacgactc acgatccatc aatccggtcg atctgtcttg ttcgttaaga aaccaaactg 480
 gtgcatggtt aat 493

<210> 5644
 <211> 266
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-049-Q1-E1-A4

<400> 5644
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 cgtctccaag atccactacg agaatatcaa gatggaagac tcagccaacc ccatcttcat 120
 cgacatgaag tactgcccc acaagttgtg taccgccaac ggcgcctcca aggtcaccgt 180
 caaggacgtc accttcaaga acatcaccgg cacctcctcc accccggagg ccgttagcct 240
 gctctgcact gccaaaggtcc catgca 266

<210> 5645
 <211> 471
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-049-Q1-E1-A5

<400> 5645
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 tcggcagcgc ctactacatc ggcgcggagg tgctgaagcg gagctacggg cccgaggccg 120
 acatatggag cgtcggcgctc atagtctaca tctgtcttc cggcggtccg cccttctggg 180
 cagagtcgga gcacggcatc ttcaacgcca tctgagggg gcaggtcgac ttcaccagcg 240
 acccatggcc gcgcattctg cagggcgcca aggacctcgt caggaagatg ctcaaccctg 300

accccaagca gcggatttct gcatacgacg tcctcaacca tccgtggatc aaggaggacg 360
 gcgaggcgcc ggacacgccg ctggacaacg cggtcctcgg ccggctgaag cagttcaagg 420
 ccatgaacca gttcaagaag gcggcgctgc gggtcacgc ggggtgcctg t 471

<210> 5646
 <211> 100
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A6

<400> 5646

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 cccgaccgcc acatctatta agtgcagcaa tggttgcctg 100

<210> 5647
 <211> 482
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-049-Q1-E1-A7

<400> 5647

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 aatccgtcct cttccatgtt gtggccttgg catgggggtg tttctgttta taattgggtt 120
 cttctttgct gccattccat ggtatcttgg agcttttgtg ctgatttgtg tccgagtacg 180
 tgattacagg gagaaaccag gatatgttgc ttgcactatt gctgcctcgc ttgctgcaat 240
 tgctgtgctg cttggcgcca caaaaggagc ggaggtgtgg tgagcattat gccttcaatt 300
 accagcagtc cggttaatgt aaatgtccgt tgctcggcta ctttgttacc tgtgtgttac 360
 atgtgttgtg cgtacaaagg atanggtgta acgaaaatga tgtatgctcc tattttagt 420
 tggacatata catttgacaa acggagtanc atgaatgcac accctcatta atcatttgat 480
 gt 482

<210> 5648
 <211> 407
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G5

<400> 5648

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gtgtgtgagc ttgcgcaa at tggacatcta ggccgtgcgt accctgcgat gaaaggcgcc 180

gtcatcggcg catcgaccgt cctggtcgtg gcggtggtgg ccaccatctg cgtcgtttcc 240

ttcaaaggca gcggcgatgg cgggagggcc gaggagggcg agatgtccac gtcggtgaag 300

tccatcaagt ctttctgcc a gccgtggac tacagggaga cgtgcgagaa ggcgctggag 360

gcggcgggccg ggaacgcaa caagcccacg gagctggcca agggcat 407

<210> 5649

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G6

<400> 5649

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gaagtaaaca tgtctgaccg ggcaaagatg tcgtggcagg cgtacgtgga cgagcacctg 120

atgtgcgaga tcgagggcca ccacctcgcg gcggcgggcca tcgtcggcca cgacggtgcc 180

gcctgggcgc agagcacggc gttccccgag ttcaagaccg aggacatggc caacatcatg 240

aaggacttcg acgagccagg gcacctcgcg ccgacaggcc tgttcctcgg acctaccaag 300

tacatggtca tccaaggcga gcctggtgcc gtcacccgtg gcaagaagg atcaggaggc 360

atcacctga agaagacagg gcaggcactc gtggttgga tctacgacga gccgatgacg 420

cctgggcagt gcaacatggt ggtggg 446

<210> 5650

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G7

<400> 5650

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tccttggttg gataggtttc aaaggcatga gaggatgag ggtcaaaaat ctgaacctct 120
acgcttttgg tttatatatg caaccgactt ctatccgtga gaagttgggt cctaagtatg 180
cttcatttcc aactgacaag ctgatggaga accctgattt ctatagtgat cttctcagag 240
aaaaccttga tataagggtc aggttggtgg ttaactacaa tggccttagc gttggtgcag 300
tgcgagatgt gtttgagaag tcccttggcc tgcggctgca gaagatgaat cctaacacag 360
actttcactg cttgaagacc tttggttctc acttcacaga agatatcgct ata 413

<210> 5651

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G8

<400> 5651

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ccacgacggc gccgtttggg cccagagcac cgcattccca cagttcaaga cagaggagat 180
gaccaacatc atgaaggact tcgacgagcc cgggttctct gccccgaccg gcctcttcct 240
cggccccacc aagtacatgg tcatccaagg cgagcccggc gctgtcatcc gcgggaagaa 300
gggatctgga ggcataactg tgaagaagac agggcaagcg atggtggtcg gcatctacga 360
cgagcccatg acccccggcc agtgcaacat ggtggtcgag aggctcggcg actacct 417

<210> 5652

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H1

<400> 5652

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ctcctaccac tacggccaga tcaacatcac ccgcaccatc aaggatcatg tctcccgcgg 120

ccacatcgac ggcaagctcc gctacggctt caacggcatc tcccacaggg acaccgagac 180
 cccctcaag ctgcgcgagt acttcaacgt caccgacggg gtgttcagct acaaccagat 240
 gggcgacgtg cccccgcgcg tttacggggc actccatgtc atccccaacg tcatcaccgc 300
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 ccacctcgac ggctacgcct tc 382

<210> 5653
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H10

<400> 5653

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 gccgagcacc atgcgaggaa ataacatgcc gcggcacacg tcgccgttac tttttgcctt 120
 gttggcgacc ctgctcagcg tcggcgacgc gttggtcgtc gacggcctgc aggtgggggtt 180
 ctatggaaag acgtgcccgg cggccgaagg cgtcatcagc gacatcgtca acaacgaaat 240
 cgctatggac cggggcatct cccctggcct cattcgctc ttcttcacg actgcttcat 300
 cacgggttgc gacgcttcca ttctcctgga cgagtcgccc gccggcgacg tcccagagaa 360
 ggagtcgtcc gccaacgggt tcacctgggt ccggctcaga aacatcgaca 410

<210> 5654
 <211> 393
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-H11

<400> 5654

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 gattggagtg cgcaatggga ggctgtgagg gaaaggtagc tcgtgatgac gaagaaaagc 120
 ttgattttaa aggtggaaat gttcatatta taacaagcaa tgagggctgg gaccagaaga 180
 ttgcagaagc aaacagagat gggaaaactg ttgttgcaaa tttcagcgct tcctgggtgtg 240
 ggccatgccg tgtcattgct cctgtctatg ctgaaatgtc aaagacttat cctcaactca 300

tggtcttgac aatagacgtt gatgacctga tggacttcag ctcttcatgg gacatccgtg 360
 caancccgac attcttcttc ctcaagaacg ggc 393

<210> 5655
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H12

<400> 5655

ccacgcgtcc gcggacgcgt ggccagattc agaggaattg aaaaaaatgt cagaaaaggc 60
 actgaaattg gccaaccag aagctgtctt tgacattgtc aaagacatgc atgagctctc 120
 ccaggagcaa ggtgtcatat cacagatata tagttccttg acttcatcct tcttcttacc 180
 atcgctgaa agcacccttc tccaacttat ctgaaacat caagctagga ttgatattgt 240
 tgacatcgtg aacttggcat tgtccctaca gtgtgggcgt gctttcggct gatccgctca 300
 catggtagtt acgggcaggg tcgtttgact gacaggttct cgcgtgtgat gatgtttgcc 360
 ttcatgttaa cttttggtaa aaaaaaaaaac attcattcat a 401

<210> 5656
 <211> 284
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H2

<400> 5656

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 aaaaaaaaaa ggacagacac acaaaaaagg taaagggttc aaaaggcgta aacgcttaca 120
 tcatcatggg tctaagggtc aaccttcttc taaattgcca ccccgttgct tttcaatggc 180
 tttacttggg aaacctcgtc attgcaaac tcaggcggtt tacaacctat ccccttttgc 240
 acaaaatgcc ttttaccxaa ccggccgtaa acgatatcgg gtcc 284

<210> 5657
 <211> 182
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-H3

<400> 5657

cacgcgtccg ggaactctct gaagcacggg gtcagggtag ttcattgttc ttcgattcga 60
tcgtanggga gataatgccg gatggctttg taaagtttgg gaggacatgc atcataattg 120
aagtcaagtg ataggatcct gttttttaag tacacgatac aacacaatct taacatanaa 180
aa 182

<210> 5658
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H5

<400> 5658

ccacgcgtcc ggccgggttc gtgaccaacg tcaccgagta catcgcgggc gccaaagtga 60
ggctggagtg caggcacttc ggcaccggca agctcgagcg cgccatcgac ggggtcaccg 120
acgcgaccgg cacctacacg atcgagctca aggacagcca cgaggaggac atctgccagg 180
tggtgctggt ggccagcccc cgcaaggact gcgacgaggt ccaggcgctc agggaccgcg 240
ccggcgctct gctcaccagg aacgtcggca tctccgacag cctgcgcccc gccaaaccgc 300
tcggctactt caaggacgtg ccgctccccg tctgcgcccgc gctgctcaag cagctggact 360
cggacgacga cgacg 375

<210> 5659
<211> 432
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-H6

<400> 5659

ccacgcgtcc agaagtactt cagaaaagga acttgtaaga gagcaggtct ttgtccttgg 60
tcgaatggga aatgctaagg aacctctttc gacaattata aataaactgg aagacattaa 120
tacatattta gcctctatta ctgcatctga ggtctggtct gtttacatga aggtctgaac 180

aagtggaacc tgacaaggat ggggtgtggct ggattacaac aggattgaag ttgattggca 240
 ggaaatgatg ctacttagca attgttcctt gactataact gcctacaaag ttgtgcaatt 300
 gtgatgtcgc atcgttggag aagacgggca cggcgacgag tccgacctgg tcaagagctg 360
 caactgcgaa atggacaaaa aaggtacctc gtggagtttt gtgtggggga tcangtcgtt 420
 gggtagatcc ac 432

<210> 5660
 <211> 384
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H7

<400> 5660

ccacgcgtcc ggggagagga gcaccacaag aaggacgacg gggagcacia ggagggcatc 60
 gtggagaaga tcaaggacaa gatcaccggc gagcacggcg acaagtccgg cgaccacaag 120
 gacaaagacc ataaggagaa gaaagataag aagaagaaga aagagaagaa gcacggggaa 180
 ggccatgacc atggtgatgg tgacggccac agcagcagca gcagcgacag cgactgatct 240
 cgcctcgcg agcgccgtac gcacaaatgc accgcgcagg ttataatacg agctgtccgc 300
 cgaacaccat gcgcataat tatacagtag tcgccaagat tgttgttctg caatcttcgg 360
 gataaaaagg ttcttttttt gttt 384

<210> 5661
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H8

<400> 5661

cgggtcgacc cagcggtccg cccacgcgtc cgggagccga cgacctggtg accgacccca 60
 ggggctcgcg ggcgctgtac gagcgggcct cgtccgcgga caagtccctc aagctttacg 120
 acgggctgct gcacgacctc ctgatcgagc ccgagaagga cagggtgatg gacgacatcg 180
 tcgctgtggt gagccccagg gtctgacgcc gccggcgctg tgcggtgctg gccgtaggac 240
 gcgagcggct ttctgacat ctgcaggcca aggacgcctc gcctccggat ggtgggtgat 300

gacgcggtct ggtctggtag gctgcggacc gagggagagc ggggtgtgcct tctcgcccc 360
 ttggtgtgct gaactgctga tacgatacga ggagcaggac aggagtacgg agaactacta 420
 ctacctacgg ctatgggcga tggcttt 447

<210> 5662
 <211> 377
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-H9
 <400> 5662

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 gccacgatcc ctccaaggcg gacaagggat tccacggagg agggataccg gccgccgggtg 120
 gatactacgg cggccagtac cccggcggcg gctaccctgc tccaccgggc ggcggtgcgt 180
 accctcccgg gcctgggtac ccggtaccac ctggtgggta cccgcctccg ggtggctacc 240
 ctcagcctgg cggatacccg ccgtcgcacg gggcgtaccc ggcgccgggt gcangcgcgt 300
 atcctcccag cgggtacccc catcaaccgg tctaccaca gcctggctat ccatcgatgc 360
 ccggtcatgg tggcatg 377

<210> 5663
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-056-Q1-E1-A10
 <400> 5663

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 gaggctcgcc aaggaggagg tcaagacggc cgcgacgcc gaggcgcgga ggcgctgaa 120
 cctctgcaag acctactacc tggacgccgc cgacaacctc ggcgcctgca agcgcgccat 180
 cggttccgc gacgccgtca ccatccgcgc cacgatgagc atggtggcgc aggacacgca 240
 gaactgcgac gaggagttca ggaaggccgt ctccaagaac cccatggagg accacaacag 300
 gtcgctcatc gagatgtccg agatctgcc cagctctcc aacatgatcc cttacgaaca 360

tgtccattga tttgtttgtt tctttttccc gaccccctac tacgttcggt aacgtcgtcg 420
tcgtcgtcgt cgtcgtc 437

<210> 5664
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-A11

<400> 5664

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gctcatgacg gccgatgtct cgacggccgc catgctctgt gcaccgcggg cgccgtgcct 120
cggcttcagg aatgacatgt atgctgtcct ttcctcctat tgcctagcgt cactgcatca 180
tctaccgcta tgctattaat attctttcaa ctatcaacaa tgtgggtcag gactcacata 240
actctgaaga ggatttcagg accgtcgtct tcaataaccc catgtacgat catatcatgt 300
cactcaccgt catgttcgat atctacaaca cgctctcaag cattatccct tacc 354

<210> 5665
<211> 456
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-A2

<400> 5665

ttcccggatc gacccacgcc tccggggaca atggacagtg tccgcactgg accctatggg 60
cagatcttcc gccctgacaa ctttgtgttt gggcaatctg gtgctggcaa caactgggcg 120
aaggggcatt atactgaggg cgctgagctc attgactctg ttctcgatgt tgtgaggaag 180
gaagccgaga actgtgactg cttgcaagga ttccaagtat gccactccct tgggtggcgg 240
actggatctg gtatgggtac gctgttgatc tcaaagatca gggaggagta ccctgaccgc 300
atgatgctga cattctcagt tttcccctca ccgaaagtat ctgatactgt ggttgagcca 360
tacaacgcca ctctttctgt ccaccagttg gttgagaacg ctgatgagtg tatggttctt 420
gacaacgagg ccctctacga catttgcttc aggact 456

<210> 5666

<211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-A6

 <400> 5666

 ccacgcgtcc gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agacaaacga 60
 acataaaaag aaaaaaaatt aaataaaaga gaaatcaaaa aacaaaacac agcaaaaaag 120
 gcacagcaaa ttgagggcgg cggccctagg ggttcagcc tcagttacgt gaaaaccctc 180
 cgtttaacca ctttaatcgg gtctcagaat ttccttcttg tggcactcgt tttcaacatc 240
 catgattggg aaaccccgtc gggtgccgac attaagcccc tttcagcaga tcccgtttcc 300
 tcccgtgggt gtagctccta agcggccccc cccgtttacc tttcccacaa tttggccacc 360

<210> 5667
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-A8

 <400> 5667

 ccacgcgtcc gagcacctcc ttttcccccg ccgggcaaca actcagccgc cgcaaccgcc 60
 acatcagcca tggg'gcgctg cgcaaccaag cccaagacgc ttgaggggca ggccccagct 120
 gatgccgccc tctccacacc caagggttgcg cccgaggcca ctccaatctc cgttgaggtt 180
 gcggctgatg aacaggtagc tgagaagggtg gtggtggagg agccggctgc ggcggccgac 240
 gttgagcatc agaaggctaa tgagggtgctc gctccagagg cggccgctgc cgagcccgac 300
 cacaatgagg aggaagccgt ggagaagacc gtcgtcgatg aggagaagcc agcggcagca 360
 gcccatgcag aggaaaaggt cgccatcgcc gccgagacca cgacga 406

<210> 5668
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-A9

 <400> 5668

ccacgcgtcc gagcgccgcc gccgctaggg accggcctac agccagcacg ggcgcgtggc 60
cctcggcccg cgcgggggcg cggcggtcat gacggctcgg gcgcggtagc ctcggccccg 120
gcgtctccgt cccggtgcgt ctccccgtgg tacggcgga cccggactca acagctcggg 180
ggcgcgactc cctgcgacgc gtggcctcat ggccctgatg gctcgtgcgc tgttgccac 240
ggtgcgcggc cccacggccc ggcggtcag gcgcggctgc ctgctacga cggccccag 300
ccccggcagc tcgtgcacgg ctgctgcga cgcgcgacc cccggatcca gtggatcggg 360
cgaaggcccc ctgcacgac tggtgagg 388

<210> 5669

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B10

<400> 5669

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cgtcttccat ggctctctcg tagtagaata gttctatctc accgcaacaa ctctcatta 120
catcctttat gagaggctga tcgattggtg gatacgtact cgggtggagc agagcaacga 180
gagacatggc gacgacgacg cgtgttgccg ccgccgccac cggcgtgctg ctggtcctgt 240
cggcgttggc gaccctggcg cgggccgagg acccgtaact gttcttcgag tggaagggtga 300
cgtacgggac caagtccttg ctgggcgtgc ccagaaggc catcctcatc aacggcgagt 360
tccccggccc caggattaac tgctctcca acaacaacat cgtcgtcaac gtcttcaacc 420
agctcgacca tc 432

<210> 5670

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B11

<400> 5670

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catggcatca tcggccgcgc tcttggtgct agccctcgcg ctagtggcgg ccaccgcccc 120

acaggtagcg gaggcaaaga agaagagagc ggcggagagc ggcgaggcgg cggaggcgaa 180
gaagatccag gacgacttct gctcgacgct gtgcgagggc aagaagggga cggacctggt 240
cgtgtgcaag gagtcctgcg cgctctccca gcagtccaac ctggtgctgt acggcaggat 300
ccagtgaag ggcaagtga ccgagcagaa gggcatcacg gcgccggcca tgaaggtctg 360
ccaggaggag tgcgacaagg cgtacgtggt gaaggcggcc gaggtcacca aggctgcag 420
cgtc 424

<210> 5671
<211> 457
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B2

<400> 5671

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tcatccagcc ttctgctctg ctccctcgaa atggaggcga cgagcaaggc gatggcttca 120
ggcctcctcg ttctgctgct tctcatcaac acaggctttg tctgccccgt ccattccgag 180
gactgctggg ccgacacccg cgtcatctgc accaagacgc acaactgccg ggacgacact 240
tgcgcggggc gcggcatgcc ggacggccgc tgccactggg agttcccca cctggtgccc 300
ttctgccagt gcctgcgccc caactgccac tagtccgggc gcctcggatt ggctcacttc 360
gccggcgatg atggatggtg cccaactgcg actgccagct ctgctccatt cgttggtgtt 420
taaggcataa tatataaact gccaaattca catgtat 457

<210> 5672
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B3

<400> 5672

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gcggcgccgc cgacctctc cgcgacgcgc tggacaacct caaggcgaag atctacggca 120
aggccatgga gcagctgacc gccgcaatgg gcgcctccga aaactgcgaa gacgcgtgga 180

acggccagga ggaggggtgtc cccgtcgccg cgcacgacaa ggagtacggt cggatggcgc 240
 acatcgccgt cggattcaca caccacgccg ccgtcgccgc cgccgccgca tgaatcgatt 300
 aattagtata tatatatatg catgctatct actatgatcg atcgcttctc gaccttcttg 360
 catcgatctg catgcatatt ataatttata ttagattgat gccacgccgc atgcaggt 418

<210> 5673

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B5

<400> 5673

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 ggcagcacca agggttgcct caaggagctt gcatgcttct agacctccg tcgactgacc 120
 catctctcta gttataatct ttctctcgtc cttgcattgc ccattacatg ctatccattg 180
 gtaacgcaca agagtaaaac gacagacatc cgacagctat attatgttcg acggtgtaac 240
 accctgaatt tgaggggtata aaatttcttc gctaaatacc agccaaattc aggtgttacc 300
 tcgtgtctct ctcgctctcg cttttccttt tgattaagag taagtgaaaa agaggaaaag 360
 cagggcggcc gctctagagg atcc 384

<210> 5674

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B6

<400> 5674

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 aaaaaaaaaa aaaaaaaaaa aaaaaaagaa taaaaaaaga aaacatacat aaatattaaa 120
 aaatttgtat acacatacat catatcatct taaattttct cgcattgtcac tttcatttcg 180
 tttctttggc cgatcctttt gtttattcgc gtcgtggaat atccatatat tcacccactt 240
 ttatcatctt gtcgggtgtc acactttttc cttgtggcta tattatttct tctctagcta 300
 cgaattacga ttcacatctt ttctcgtgt ctctctctct cgctcttctc cctttgtttc 360

ggcgtatgtg ccgcgctgtc tatggtgctt acccgctcta tgggctcttt ccttacttac 420
gccttaatgc catttccttt ctcttccttt 450

<210> 5675
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B7

<400> 5675

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acaggtcata gctaagcagg tctgacagga tgtcgtggca gacatacgtc gatgagcacc 120
tcatgtgcca gatcgagggc caccacctga cctccgctgc catagtcggc cacgacggcg 180
ccgtttgggc ccagagcacc gcattcccac agttcaagac agaggagatg accaacaatca 240
tgaaggactt cgacgagccc gggttcctgg ccccgaccgg cctcttcctc ggccccacca 300
agtacatggt catccaaggc gagcccggcg ctgtcatccg cggaagaag ggatctggag 360
gcataactgt gaagaagaca gggcaagcga tgggtgctcg catctacgac gagcccatga 420
cccccgcca gtgc 434

<210> 5676
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B9

<400> 5676

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caccaaatct atctgagggg tgcgagcgcg ggcgacaaga tgccaagcgg cggttaagccc 120
gcggttcgt cgaagccgaa gccgttcgaa tcggactcgg actcggagtc cagcagtaag 180
ccggcgaatc aagtccgggg cgtcgtcgta ccaggctccc gccgacgcca aaaagcggta 240
caaggacggg ttccgggact cgggcgggct ggagaaccac tcggtgcagg agctggagca 300
ctacgcggcg tacaaggccg aggagacgac ggacgcgctc gccggctgcc tgcgcacga 360
ccgaggacat caggcaagac gccagcgaca cgctgatcac gctgcacaag cagggggagc 420

agatcagcct gacgcacgag aaggccgt

448

<210> 5677

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C1

<400> 5677

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tacacatcca ggggcgatga cgctgggtag ctccggcgcc ggatcgagcg tcgtcgttcc 120

ccgaaacttc aggtatttag aggagctcga gcgtggagag aagggcattg gtgatggaac 180

agtgagctat ggaatggatg atgccgatga catctacatg cggtcattga ctggtaccat 240

cattggccct cacaatactg tacatgaggg tcgcatctag cagctgaagt tgttttgtga 300

caaggactat ccggagaagc caccatctgt cagattccac tcaagaatca acatgacatg 360

cgtaaatcac gagacaggaa tgggtgatcc aaggaagttt ggtttgctag cgaactggca 420

gcgggactac acaatggaga acat 444

<210> 5678

<211> 134

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-056-Q1-E1-C10

<400> 5678

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gggcgacggg atgccacgcg gcggctggcg cgcggcttcg tcgaaccoga gggcgttcgg 120

gtcggattcg gact 134

<210> 5679

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C11

<400> 5679

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atgaggattg tggcgctggc cttggtggcc ctgctggtgg tggccgcggc ggcgcccgtg 180
gccaccgcgt accgctgcta cgacgactgc tacgagcgct gcgccaacgg gaagaaagac 240
cccgctgca ccaagatgtg caaccacggc tgcgggtcca cggaccaggc cgccggtgcc 300
gccggcgccc gcgcgggctt gatcgcccag cgcattcatc gcttcagctc gatataatcg 360
ctgctccgtc agcaaccac atatgattcg attaattctc ctctcgaag ttctcgaccg 420
cgtcgaattt ttttc 435

<210> 5682
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C5

<400> 5682

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ccaaagatga tgtccgagaa ttgatttacc gagagatttt ggagtaccat cctcaaatgc 120
tacaagaata cctacaagga gcagaccaca atcagatgac cttcatgtat ccaagtgggg 180
tggatcgctt caggcgccaa tttgctcatt tggaagaagg tactgcaaag ggtgaaaaac 240
acagtccaca gctgcgacag aatgtttctt tgccaagga aagagtaatt ggcaataaac 300
atggagatgg caatacaggt gataagctag cgcatgcctc agtgacggat ggcatcagcc 360
aaccgagctt gagtgagaga agctttctga agagtgaag catcagtgc tccaag 416

<210> 5683
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C6

<400> 5683

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cctgctgcag gtggtcaccg cgcgccacc catggggctc acgcaccacg tcgagaaggc 120
catcgacgcg ggcaccttcg cgcatgct cgacatcacc gtcaaggact ggcccgtcga 180

ggaggcgctc ggctacgcaa agctcgcgct caagtgcacg gagatgcggc ggagggaccg 240
gccggacctc gcaaccgtcg tactgccgga gctcaaccgg ttaaggaacc tcggccacgc 300
gtacgaggca cgcattgagcg ccgtcgggac caacagtgga agtggcgaaa gtaatgacca 360
ggtcagcggg agctcgcgga cggcgggtgg ttcattggaga acggcggaag gctagcgggt 420
ggtacggcgt ggccatg 437

<210> 5684
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C8

<400> 5684

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ccgcaaccgc cacatcagcc atggggcgct gcgcaaccaa gcccaagacg cttgaggggc 120
aggccccagc tgaggccgcc gtctccacac ccaagggtgc gcccgaggcc actccaatct 180
ccgttgaggt tgccgctgat gaacaggtag ctgagaaggt ggtggtggag gagccggctg 240
cggcggccga cgttgagcat cagaaggcta atgaggtgct cgctccagag gcggccgtcg 300
ccgagcccga ccacaaggag gaggaagccg tggagaagac cgtcgtcgag gaggagaagc 360
cagcggcagc agcccatgca gaggaagagg tcgccaccgc cgccgagacc acgacgacgg 420
tggaggcgaa gaagaacgcc 440

<210> 5685
<211> 467
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-056-Q1-E1-D1

<400> 5685

accggtctta gattcncgga tccaccacg cgtccgaaca gggtaaggc gctcgtcggc 60
gccttcgaga ctgtcataga caccagaag gacgccgccg ccggcaggcc acaacacatc 120
taccgaagt cagcttaaaa catactgcgg cggcggggac gcatcgatcc tccacgcttc 180

gtgtcttcgc ctttaattaat taattaattg ttatgatcat gtcggccagc ccaacgccgt 240
atgcatgcat gcacacggcg ctaattaatc cctgtttatt tactactccg tgaaatgtag 300
tttctccgta tacacggagc agtagtattc tgtaaagagg aaaatgggtg aaaccgatgt 360
tgcattctgc ataaatttat taatagggct agtttcacaa ccttattttt tctaagaggt 420
tttagttttt caaggggaatt taattcattt tctcttgaaa aaatagg 467

<210> 5686
<211> 458
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D10

<400> 5686

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tgattatgcc actgatctct ttaacatgtt gtcaatggat ggaacaacag agaaagagtc 120
agcttcatct tcaaacgacg ataatggctg ggatggcttc cagtctgcac aaccagtacc 180
tagttcagag aaaaaagatt ctgccaaacc agcagaaagc aagaccagtc ctacatctgg 240
aatggaagac ttattttaaag actcaccagc tgtgccatta tcctcagctc cagctgtttc 300
ccaagtaaac gctaagaatg atatcatgag ttgtttgag aagtccaata tggatcacc 360
tttcgctgcc catcaacagc agctggcgct catgtctcag cagcaagctc ttctaattggc 420
tgctctcaa gctggaaatg caccacagat gatgattc 458

<210> 5687
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D11

<400> 5687

cctgcctgta ccggcccaga attcccagat cgaccacgc gtccgcccac gcgtccgccc 60
acgcgtccga ttatcacta tacataacca atatataagc catgggcaag cgcagcgtcc 120
ctcggtagcc tgaggacgag gacaaaggcg gctgctgcgg ctgcctgtgc tgggtgctgct 180
gcttctctgtt gttcatcgtg gcggcgctgg ccggcacggc cgctacttc ttcttcgtgt 240

acaagcccaa ggcgcgctcc tactccgtga gcaacatgtc cgtctcgcag ttcgacttca 300
gcacctccga cctgacgctg tacgtcaagc tcaccgcctc cgtgcgcgcc gagaacccca 360
acgagatgat caccatcagg tacggcgagg gctccacac cgtggtctcc taccgcggca 420
cgccgctgtg ctccgggaag ctcccgccct tc 452

<210> 5688

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D12

<400> 5688

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ggagcagcgg agcacacgtt catgaggatc gacggggagc catggaagca gcctctcccc 120
aaggaggacg acaccgtggt ggtggagatc tccaacctcc gtcaggtggc catgctggcc 180
aacgaccctg gcagggtccaa gagcgtgaac gagccgtcct ccccgctcgtg ccacggccat 240
gaggacgacg acagcaacag cctggaggac gaggacgagg acgagtggga ggacgggagg 300
aagaagtctg gtgcggcggc caccttcaag attccccgac aggtggacat cgctcatctc 360
agttagaacc tagaaacccc gccggctgct tctgcgtcgg ttggtggtgc tgactgctga 420
gtctgtgcat ttc 433

<210> 5689

<211> 326

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D2

<400> 5689

tcgaccacg cctccgcaac tgcttctct tgctctgcct gctccgcaa tgcccggcat 60
gggtggccct ccacctccga tgggcggaat gggcatgcct ccgatgggcg ggatgggcat 120
gccgccgatg ggccctggtc cgatgccagc attcgggatg ccaccaatgg gaagctactg 180
agatgagatg tttttttgtt gttgttgacg agagcttaga tgatgatttg atatgttctt 240
gtgtaagcag aggcggaaac ctcatggag ttgtagatgg ttacattttg gaattaatat 300

tctttatggt accaggaaat ttttgg

326

<210> 5690

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D4

<400> 5690

cccacgcgtc cgcagacgcg tgaggggagc acagagctag ctagccagcc aagcagcagc 60

caacttgctc gccgcgcccg tcctttcttc tcgcctccgt tccattccgt tccggcctcc 120

accggcgccg ccgcattcag ggatggagat gaagaagatc gcctgcgccg tcctcgtcgc 180

cgcctcggcg gccaccgtgg cgctcgccgc ggggctccgg ctccggcccc caccagcggc 240

tcctccgcg tcgcgcccgc cgctggcgcc gccctcgggg ccgccgtcgc ctccttcttc 300

gcctactaca ttcagtgagc cggccggggc gcccgaggc cgaggaagag acgaagggga 360

gagagagtga catggctgcg cgcattccga tgcgtgggca tgttttttga ttcgacacac 420

cttttgcct c 431

<210> 5691

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D5

<400> 5691

ccacgcgtcc gaaacaaacc acagattgag cagctcatat tttggtgtca gtattggatt 60

ttagttgccc tgttgacagt tttggagaga tttggagatt ttacaatatc atggctaccg 120

ttttactcag aagcaaaggc gttgttcttt gtatatttgt ggtaccctaa gacaaaggga 180

actacgtatg tttatggaac tttctttaag ccatatattt ctcagcatga gaatgaaatc 240

gaccgaaatc ttcttgagct cagagctcga gccaccgata tggttgtcct ttacttccat 300

aaggctgctt cggtagggca aaatactttc tttgacgttt taaaatatgt tgctgcccag 360

tcgccttctc ggaaatcaag gctgcaccct catcaggaac cacagcagca gcaagcacia 420

gtgcaggtgg ag 432

CCAGGCGCCG CCGCATT CAG GGATGGAGAT GAAGAAGATC GCCTGC GCCG TCCTCGTCGC

<210> 5692
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-D6

 <400> 5692

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 gaccttcgtg gacactccag gagttttatc aggggagaag cagcggacgc agcgcagcta 120
 cgatttcacc ggagtcacgt cgtgggttgc ggccaagtgc gacctgatcc ttctcctggt 180
 tgatccgcat aagcttgaca tcagcgatga gttcaagcgt gtgatcgggt ctctccgcgg 240
 gcatgatgac aagatacgca tagttctcaa caaggccgac caagttgatg cacagcagct 300
 gatgagagtg tacggagcac tgctgtggtc gctcgggaaa gtcctgaaca caccagaagt 360
 catgcgtgtc tacatagggt cattcaacga caagccgatc agggagacag cggctggggcc 420
 gctgggcatg gagctggt 438

<210> 5693
 <211> 181
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-D7

 <400> 5693

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 catatgtttt atttctgcg ttttccctac aaaatcagcc atatgggaaa cgcaggaaat 120
 aaaacattgg cttggacctc ttttttcaaa agaaaaaaaa aaagggcggc cctctagagg 180
 a 181

<210> 5694
 <211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-D8

 <400> 5694

ccacgcgtcc gagttgccct acctgcaggc aagagctggg cgacatcagg tgcctggcgc 60
 tggagaaagt cgccgagtcg ctggagctcc cctgcaggta ctactcgctg gggtgccccg 120
 agatcatgcc ttactacagc aagataaagc acgaggcgca gtgcggcctg agaccgtaca 180
 actgccccta cgccggctcc gagtgcagcg cggccggcga catcccttcc ctctctccc 240
 acctgaggga cgatcacaag gtggacatgc acagcggctg caccttcaac cacagatacg 300
 tgaaatccaa cccgcgggac gtggagaacg ccacctggat gctgacggtg ttccactgct 360
 tcggccacta cttctgctg cacttcgagg cgttccagct cgggatggcg cccgtgtaca 420
 tggacttcct ccgcttcatg gg 442

<210> 5695

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-E11

<400> 5695

ttcccagatc gacccacgcg tccgaccacg cgtccgcgga cgcgtgggcg aacgtcgtac 60
 gagaaccttt ctccctcctc cacctttctc cttttcttgc cacggcaaaa caccttcgcc 120
 ggcgagagca tggcgatggc gtaccgtgtc ctggaggta ccttgggtgc ggcaaatgac 180
 ctcaagaaag tgctcgtctt ctcccggaact cgcactctacg ccgtggcttc catctccgga 240
 ttcgacctcc gcatcccttc ccacagcacc caagcagacc acagcaacgg ctgcaacccc 300
 tgctggaacg ccgtggtaca cttcccctc cgggtgccg ctgacacccg cggcctcgca 360
 ctccacgtga ggctccgcgc ccagcgtcta tacctgggcg atcgcgacat cggcgagggtg 420
 tttgtgcca tcgacg 436

<210> 5696

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-E3

<400> 5696

cgacccacgc ctccgggtca aacagagctc aggaggaggc tctctctcct gtcttacctg 60

ttcgctcccc gctccccctc catctctttc gccacacgcg cgagaggggg gagaggaaac 120
 agctagcagc gagcgaggaa cgaagagggt gcttcgcacg tgcattgtgag atcgggcgat 180
 cccgatcgtc ggccggcgcg aattgaacta acgacgacgt acgtgcgacc gggccgggcg 240
 ttggattatt ccggcctgag caatgggcaa gatcgagtac ggcgtggtgg cgcgcgcgcg 300
 ggtggtgctg gcggagcact acggcgcggc ggcgccggcg ggcaacgcgg gcgccgtggc 360
 gcggcaggtc ctggagcgt 379

<210> 5697
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B6

<400> 5697
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 tcgcggtcct ggccgcgcgg ccggcgctctg caggcggggg agccgcggcg gtggcggaga 120
 tctgcatgaa gactccgtca cgcgacctgt gcaccaggac ggcggggaag cacgccaaca 180
 agtacaacgt ggtggacgcg gtgacggtgc tagagatgca cgtggacgcg ttcaagaagc 240
 gcgtgaaggc ggcgcgaggc ctgcgcaagg atgaggtcaa gacggccgcg acgcccagg 300
 cgcggaaggc gctgaacctc tgcaagacct actacctgga cgccgccgac aacctcgcg 360
 cctgcaagcg cgccatcggc ttccgcgact ccgtcaccat cagcgccacg atgagcatgg 420
 tggcgagga cacgcagaac t 441

<210> 5698
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B7

<400> 5698
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 tcctagtac acaagtggaa gtgggcaaac gatctgtgat ggcttcccgg tgtatagttt 120
 ccatggttca tttgtgtgct tgtcccatgt ttgcctgggg acgatgacgt ttacaattt 180

tggcccccat cgcgcgcaact cgtctgtttc tctcatggaa gccgtgtgaa cctgtgcgtg 240
 tgtgtgacga atgaacggaa ctttatatgg accagtgtt aagagtcttt gcaacataat 300
 tatgaagggtt tgtttgcaaa aaaaaaaaca gaaaagtaaa gaataaaaaa aagaagtaaa 360
 aaaaaaagta aagaaagggg ggccgctc 388

<210> 5699
 <211> 439
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-061-Q1-E1-B8
 <400> 5699

ccacgcgtcc gcaaccgtgt gccttttggg gacgcgatgt cgtccggcaa caagatcagc 60
 gtggccttgc tgagcgtggc cctagtgggc ctgtcctct gccacctgc caccaccgcc 120
 tccgcccacc agaaagacat ccacgtctc ggcagcgtcg acggctccag cgacggcagc 180
 agccccgagt ccgaaggccg cgtcgtctac gcggacatga agctggctga tacggaatcc 240
 gatgcgccgg cgccggcgcc ggccggggg ccgtcgtccg gttgaactga gaagcgtgcg 300
 tccagccaag caaggtggtc aaaaccgaga actaattaag ggctcgattg tgtgtccggc 360
 tactactgtt cttgccataa ttatatatag atacgcaaag tgtggccaag cctaccacaa 420
 tgcattgctat tgcattgctt 439

<210> 5700
 <211> 451
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-061-Q1-E1-B9
 <400> 5700

attcacgggt cgaccacgc gtccggcagg tccagagatc tcgacgggtc ctcttgcaga 60
 aacgaggaaa gaaaacatgt cttctcgtg ggttagggcg gaggtgtacc cgctgttcgc 120
 gacgacaggg gtggcggtgg ggatctgct gatgcagctg gtgcgcaaca tcaccaccaa 180
 cccggaggtg cgggtgacca aggagaagcg ggcggccggg gtgctggaca accacgacga 240
 ggggcggcgc tactcgcagc acggcgtgcg caggttctgg ctctccaagc gccgcgacta 300

tggaggtggt cgacaaggac acgttcagca gggacgaccc gatggggggac gcgagatcg 420
acgtggcgcc gctggt 436

<210> 5703
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C11

<400> 5703

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atccattctc cagcgcagcg aagtaaacad gtctgaccgg gcaaagatgt cgtggcaggc 120
gtacgtggac gagcacctga tgtgcgagat cgagggccac cacctcgcg cggcggccat 180
cgtcggccac gacggtgccg cctggggcgca gagcacggcg ttccccgagt tcaagaccga 240
ggacatggcc aacatcatga aggacttcga cgagccaggg cacctcgcg cgacaggcct 300
gttcctcgga cctaccaagt acatggatcat ccaaggcgag cctggtgccg tcatccgtgg 360
caagaaggga tcaggaggca tcaccgtgaa gaagacaggg caggcactcg tggttggcat 420
ctacgacgag ccgatgacgc ct 442

<210> 5704
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C3

<400> 5704

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agagaaggat gtgaatgagt ttctcttcgg ctacttgat gttccattag taaacttggg 120
gacgagtctg cggaattatg aaccttcgga tgtacctttt gatatttcat ctgtttcgaa 180
ggaaacaaaa tcccaacccc ttgcggagaa aaagtctaca ggcaagaaat cagcaggtcc 240
agcatctgct gtcagtggct ctgtttctac agttgatgct tcgtatgaga agcttctttc 300
gtctattccg gaattcgctg attttgaaa gctttttaag tcatctgcac ctgtagaatt 360
gactgaagct gagaccgaat actcagtga tttgtgaag catatttttg atcgacatgt 420

tgtgctccaa tacaact

437

<210> 5705

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C4

<400> 5705

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cctccttctt cgctactac attcagttag cgggccgggg cgcccgagg ccgaggaaga 120

gacgaagggg agagagagtg acatggctgc gcgcattccg atgcgtgggc atgttttttg 180

attcgacaca ctttttgtec tttttttctt tgttccctct ttctccttaa tttaacgaat 240

tgatgcatgc cgctgatgtt cttccctga gagagggatt aacacttgta tcatttcac 300

gcttgccatt tgtttgaatc cattcaacaa ttcattc 337

<210> 5706

<211> 282

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C5

<400> 5706

ccacgcgtcc gtccacatat tgatcacagc attgtcactt accctccaac gttgatgcc 60

catctacgtt taccgcgtacc agtgcttatg tctttcagac aaagatggaa tcggttcaag 120

gagatttgcc agtctagtgc ctcagccacg gctgacttca cgtgggaatg acctactgaa 180

cttcgagatt acctctgcac atgcatggac ttgtcatggc tcaaggcatc aagcaagaga 240

atgtcaagaa tgacgaatgt agctgctgga tgggtccagat tc 282

<210> 5707

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C6

<400> 5707

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atgtgctttg gaatcggcctt ggtgcttaac actattgcta ttttctatgg atcgtttagct 120
gccataccat ttggtacgat ggtgggttgtt ttcacacctgt gggccttcat ctctttccct 180
cttgcacttt tgggaactgt tgtcggtaga aattggagtg gtgctccaaa caatccctgt 240
agggatgaaga ctattcctcg ccctattcct gagaagaaat ggtacctcac accatctgtc 300
attgcgctta tgggaggact gcttcctttt ggtagtatct ttattgagat gtactttgtc 360
ttcacatcgt tctggaacta taaggctctac tatgtttacg ggttcatgtt gctgggtcttt 420
ctgatact 428

<210> 5708

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C7

<400> 5708

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acgctagccg gcggtcggcc agccgccgcc aaccgcctca gcccacaacag tcgcaccgcc 120
gccgccgagg caaactcgaa gccacccccg ccgccgcagc cacagccgcg ccgagcttga 180
gccgtcgttg ctccgctgaa tcgcccccat cgtctctcct gaagagagag gacatttatt 240
gagacagcat gcctaagata aagacaagtc gtgtcaagta tcctgaagga tgggagctta 300
ttgaaccaac catccgtgag ttggatgcc aatgagaga agctgaaaat gatccacatg 360
atggaaagag aaagtgcgaa gctctctggc ctatttttcg tattttctcat caaaggagcc 420
gctacatata tgatctttac tac 443

<210> 5709

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C8

<400> 5709

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tgcccaagct gagttcccc accccaaca aacaattact agagtagctg cattggcggg 120
gaaattaaag cgctagaagc tcagcagcaa tggcggagca ggcgggcgtc ggaagggtact 180
ggtgccacat gtgcgccgcg gccgttagcc ccgcggaggg cgaggtggag atgaagtgcc 240
cgttctgcc aagcggcttc ctcgaggaga tggagaccgc ccgcggggcc gcgaccgacg 300
acggtgacgg cgacggcgcg gtggctcagg tgcaccccg cgccgaccgc ccgagctcca 360
tctgggcgca cgctatcctc agcacggtcg acagctccgc ccgtcgccgc cgca 414

<210> 5710

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C9

<400> 5710

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gtaaagagcg cagaaggaga gttcttattg cgtgttgatg gtggtgctac tgtaataat 120
cttctaatagc agatccaggc tgatttatta ggcagccctg ttgtcagacc agctgacata 180
gagaccacag cctcggagc tgcataatgct gctgggttgg ctgcaggagt ttggaccaag 240
gagaagggtt ttgcagggtt gcacaaggag aacacgacag tcttccgccc gaaactggat 300
gaggcgcaca ggaaaaagag ggcggattca tggtaacaagg cggtttcaag atcattcgat 360
ctggctgac tttctctgta aatttatcct gccagcgctc ctctatctgg ttttgggaagc 420
tgcaaatgaa taaat 435

<210> 5711

<211> 208

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D10

<400> 5711

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caagctgcgc ctacgctgtg taggtttgtg ctggtacatt gagagctctt atttatttgc 120
tttgattgca attaaccagg atgaccatag cccttggttg gtttgctgtt tttataagtt 180

gcatgaacac aacttctggtt tggttaaa

208

<210> 5712

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D11

<400> 5712

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caaaacgggtt ggatagagat cgcctcgtt gatcagaggc cgtccatcgc ggaaccaacg 120

gtggatgctc cttcacgagg ttttgaacac ttcagcccga cgaattgttc ggttcgtcga 180

cgacaacctc catttggttc acaatccaca attccccacc cccacgggcc cccgggcccc 240

cccacctct cctcttctt cctcactcct ctctccctct ctctctctct ctctctctct 300

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atgatgacct ggggcacgat ggggcccat 389

<210> 5713

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D12

<400> 5713

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tgatgatata gacaaagggc agtaccattg catcgattgt ggcatatgca gggttggtgg 120

caaggaaaac ttcttccact gtgtgaagtg tgggtcctgc tattctgtta tactccgtga 180

taaccatcag tgtgtggaga actcaatgag gcagaattgc ccaatctgtt atgagtatct 240

atttgactca ttacaaggaa caagagttct gaactgtgga cacacaatgc acttgacatg 300

ttttgaagaa atggtggcgc ataacaata cacttgcca atatgctcta aaacagctct 360

tgatttgaca catcattggg aatgtttgga tcaagagatc gaagccacga tcatgcctcc 420

tgtgt 425

<210> 5714

<211> 439
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D2

<400> 5714

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cgctggacgt ggtcaagtcg cggtccagg cgcagggcgc ggcgtcggcg ccaggtacc 180
gcggcgctgt cgactgttc cagaggagcg tccgggagga aggcctccc gtgctgtggc 240
gcggcctcgg caccgccgtc gccgcgcgt tcgtcgtcaa cggcgccatc ttctccgcct 300
acgagctggc cctgcgttc attgccagcg gcggcgccc caggctggc atggaggaca 360
agtgagtcag actggacat gttgtacata ggctagtata agtatccatt ccagtgggtg 420
gtggagagta ccatgccac 439
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<210> 5715
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D3

<400> 5715

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tgaccgtgac ggcgcccggg gacagcccca acacggatgg catccacatg ggcgactcat 180
ccgggatcac catcaccaac accgtcattg gcgtcggcga cgactgcac tccatcggcc 240
ccgggacctc caaggtgaac atcacggcg tgacctgcgg ccttggccac ggcatcagca 300
tcggaagcct agggcggtac aaggacgaga aggacgtcac ggacatcaac gtcaaggatt 360
gcactcttaa gaagacgatg ttcggcgtcc gcatcaaggc gtacgaggac gccgcctccg 420
tgctcacctg ctcaaagatt cactaccaga atatcaag 458
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<210> 5716
 <211> 426
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D4

<400> 5716

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cgagggccac cacctgacct ccgctgccat agtcggccac gacggcgccg tttgggcccc 180

gagcaccgca ttcccacagt tcaagacaga ggagatgacc aacatcatga aggacttcga 240

cgagcccggg ttccctggccc cgaccggcct cttcctcggc cccaccaagt acatggtcac 300

ccaaggcgag cccggcgctg tcatccgcgg gaagaaggga tctggaggca taactgtgaa 360

gaagacaggg caagcgatgg tggtcggcat ctacgacgag cccatgaccc ccggccagt 420

caacat 426

<210> 5717

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D5

<400> 5717

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ggtcgccatg ctagecgttg tgcgcgatgt cgccaacgcc ggccacgcca agccccctgac 120

gcctggcggg cgcggtgtac acgacaacca cggcaagttc acggccggggc cgtggaaacc 180

tgccacgcg accttctacg gcgggcgggg cgggtccggc accacggcgg gcgcgtgcgg 240

gtacaaggac acgcgcgagc aggggtacgg cgtgcagacg gtggctgtga gcacggtgtt 300

gtttggcgat ggcgcggcct gcgggcggtg ctacgaggtg cgggtgcgtg acagccccag 360

cgggtgcaag cccgacgcgg cggcgctggt ggtgacggcg accgacctgt gcccgcgc 418

<210> 5718

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D6

<400> 5718

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ttttatgcc aagcggttttc ttttggtata ggcgacaaga attgcacggc tgtacacaca 120

aaagcaaaca gcacgcagtg aatagcagcg tacgtacaga taccgtgcta gctagctcaa 180

acgaagatta ttgccgcctg ctgctgtgct gtgcctcacg tcgtcagcta gcttctcctc 240

tgcgattctc cgctactacg tataccgtcc cccgtgcagc cgcgcgccgc gtatgtagtg 300

gcggctggcg tgcggtcctt tgcgcgattc gatcgacctg ccgcctggac tggatcacgt 360

gtttgtggtt cagcgacgca cgcgtgtcgt ttcgattact tgtaccgcct ggagctggag 420

ctggctttgc tgcgtgttggt gtaccggtgg tcgtc 455

<210> 5719

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D7

<400> 5719

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aagggcatca ccgcgccgca gatgaagggtg tgccaagagg cgtgcgacaa ggactacgtg 120

gtcaaggcgg ctgaggtcac caaggcctgc aacaccacct gcgccaagga gaagcagcct 180

ctgctcagcg agaactgcag gaggtcctgc acccctcctc cttcctgaac gcagagcacg 240

cccgccggtc gtcgtcttct gcctgcttgc gtgacactga atcactgata catcatacat 300

gcatgcatgg gatgcgatga cgatttgatg catgcatgca tgggtatacc taccaatttg 360

atgaccgacg atgtatagtt tcgtcgactg cttcatacac atatatagca gcccaattaa 420

tgtaacgtca c 431

<210> 5720

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D8

<400> 5720

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ccgaggcccc ggcgcccgc cccaccagcg cctcctcggc cgcgttcccg gccgtcggcg 300
ccgtgctggg cgctccgtg ctctcttct tgcctacta cctgcagtaa aattaaagga 360
ggatcggang gagaggctgc tggctgccat tgcctgtatt cggttggatt ccgtttatat 420
atatatttaa g 431

<210> 5723

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E10

<400> 5723

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gcggttgccg ggcagctcgg attcgttgcg aggttcacgg cgtgggttgc acatcaaaac 180
ggcattccga tctctacggc ctccaccgcg ttcattggtg aaggaggctt ctgcgcgaca 240
gggccccaaac ggcagagacc gggtcagtgc tgtttttctg cggatgggtcc aaggagtggg 300
gtcgatccgg tagcgttcgg cccgtgattc ctggtggcag caacacattc agccgagcct 360
gcgtgacttt cgcgcgagat ggggaagacg caccgcacca gcgggtccca cacg 414

<210> 5724

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E11

<400> 5724

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agaccttcgt gtgtatctgc agaacctagc cgctgcagat aatgttcagc attttgttcg 120
tgataatccg tttggtcaac ctttcattac tgagagcgat ccgcattgga acttctatgc 180
tcagattgct gatagagggc gtgcaccctt gacatgttgt gcttgaactc ccaagggtcg 240

tgcttttttc tgggagttct gtggttatcc atgatcaaaa gatcatgatc agtatacagt 300
 gatctttctct gagtagtttg cttgtatccc tgtactgaag attacagagt ttctgctatg 360
 ggtttaaatt gcaggctcta cgaaaggtat cagaccaaatt gaatgaattg tctgacatta 420
 tctc 424

<210> 5725
 <211> 349
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E12

<400> 5725

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 ggggtgggag ctggacctca ccgaggcgca ggccaagcca ttcgtcggca cacactacgt 180
 cctcggcgac acgtggatcc agccaccgcc caagtagcga cgcattgccac acgatataac 240
 tatttgagta cgaagcaaaa gcgagagaca cgaatctcta atctctttac tgatgagatg 300
 ttttgcttat atatatatat agacgagcta atgaaagctc aggggttttc 349

<210> 5726
 <211> 387
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-061-Q1-E1-E2

<400> 5726

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 tttgttattt tttatttatt tcttttttct tttattttt gttatttatt tgtttctttt 180
 attttgttta aaaaagaaaa aagcgggact tcaaaagggg aaacaaatga gtatcaaaca 240
 gggcaacaat ggctcgaca aaagtcacat tcaaacattg gtgacttaga cgggataatt 300
 taggtgaaaa cacatttggg ggccgggaaa ttcacaaatt tggcgaggtt ttaaccttgc 360

ttctaaccaa aggaaaacat ctgtggt

387

<210> 5727

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E5

<400> 5727

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gatagcgatc gagagatacg tcaagatgag taaagtggca tcatcgtcag ccgttctctt 120
cgtgctagcc ctgacgctaa tgtgtgccgc gctgatagca gaggcagagc agaagacatt 180
cgcagccgcc gccgccgagg agaagtaggt gcatgacaac ttctgctcga cgctgtacga 240
tggcacgaat gggatggacc tgatggtgtg caaggagtcc tgcgacctct cacagcgctc 300
caagttgatg ttgtaccgta ggatccaatg caatggcaag tgcaccgagc a 351

<210> 5728

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E6

<400> 5728

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gggtgcaagc ccagcgcggc ggcgctggtg gtgacggcga ccgacctgtg cccgcccac 120
gaccagcagt ccgcggacag cggcgggtgg tgcaaccgc gcggggagca cttcgacctc 180
agcatgcccg cgttcctcca gatcgcgag gagaaggccg gcatcgtgcc catctcctac 240
cgcaggggtg cggtcacgaa gcagggcggc attcgggtaca ccatcaccgg gaacaagtac 300
ttcaacatgg tgacgatcac caacgtgggc ggcgccggcg acatcgcggc agtgtcgggtg 360
aaggggagca agcgcgttaa gtggacggag atgaagcgca actggggggc 409

<210> 5729

<211> 317

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E7

<400> 5729

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aagagagaac cttgtaccat gttaagatac tgttgagctt gtgacgatgc gcacggtaga 120
agaggaacct tttttttttt gcggttgat tgtgcaaact gcgagcagta gtgagtgtgg 180
tatatttggc ccttcagttt cctgttggtt ggagtgttct tgtcgtttgg cacggcacac 240
tagtattatc agcgctctgt tgaaggatgg atcggaatgg atgcccagat agtctgggac 300
ttgtggtgat gcaaaaaa 317

<210> 5730

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E8

<400> 5730

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caggccaca tggtaagagg aagcgcagtg cctcgcgga ttaggtgtga cgacatattg 120
cgcatctaat gcaacaacag acacgcagac taaaaaaca cagtgtcata ctaccatcca 180
atgcgcgatg ggttcatagg atcacgacac gtctctttcc accaggacca ggacatcgtc 240
gtcgtgacca cagccctctc cggcgccaat atgatcgaca tcaactgaaa acagcaagca 300
gagatatctc atgtgcgact cctcagcaga cgccacgtag actgatcaga cattcaa 357

<210> 5731

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E9

<400> 5731

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gctggcgctg gtgctggcgt gcgcgctgct ccagccgcgg ccgtccgacg ccgcggcgca 180

gcccgccccg cagtcgccgg cgacggcggg gtcgtcgggg gccgccaagc ccaagtgcgt 240
 ggccggcgcc aggaacgacc acgcgtgccg cgtcggcgcc gtgcacgacc cggacagcca 300
 ggaggaggag gggtccagcg tcaccatcga cgcgccccgc gccgcgcccc acgacgtcgg 360
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<210> 5732
 <211> 444
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-061-Q1-E1-F10
 <400> 5732

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 ccgccggtgg gcggcagcgc tctgaagccg gactactaca gccagtcgtg cccgcgcgcg 180
 gagaggatca tcgcggaggt gatgcagacg aagcagatgg cgaacccgac gacggccgcg 240
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 atcgcgtcca cccagttcca gaagtcggag cagcagcgg agatcaacca ctcgctcccc 360
 ggggacgcct tcgacgccgt ggtgcgcgcc aagctggccc tggagctgga gtgccccggg 420
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<210> 5733
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-061-Q1-E1-F11
 <400> 5733

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 gtccagtgca tcaatagatg agcatctgag ctatgaaggc ataagcagtg gccatgatat 120
 gcaaataatt ccacttgatg gggctgattc tggttttgaa gggcaccaga catcttacag 180
 agaaatacca gtggagcctc ctgagatgtt tcttgcaggc ttaattgttc acatagtgcg 240
 gcaaagaaga agtctctttc ctctttggaa atgctggagc atccaggaaa ctgaaccacc 300

atacaaagct gttttagcga aaagggagaa cttcanggat atagtggta ctccttacat 360
gtttacagat cacttaccat ggaggtgcc a ctttgctatg cagaagattg ttgaagct 418

<210> 5734
<211> 394
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-061-Q1-E1-F12

<400> 5734

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ttcttgactg gaaagagaga cgtaagaatg tccagaatga gcttgataag gcattggaag 180
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tggaattgtg taccactagg agaaccattg aagggttgaa gctaaatcta gagaagacac 300
aaattgaggc aatacaagca caacaagact cggagcttgc tgacatacgg ttcaaagaga 360
ttcaacaagg aattgcatgt anagagagtg ctgc 394

<210> 5735
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F2

<400> 5735

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aggcaatccg ccgccgacgt accaccacca ccgcaggagc gagatggaga tgaagaggat 180
cctcttcgcc gtctctcgctg tcatcgccgc ctccggccacc gcagtgtgtg cctccaccga 240
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tggcgctggc gctgccgctg gcgccgccgc cgcggggccc tccgccagca gcggcgcgcc 360
cgccctcgcc gccgcgccc cgcgctcct cttctccctc ctgcgctact acctccacta 420

agcgtgtgcg

430

<210> 5736

<211> 61

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F3

<400> 5736

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g 61

<210> 5737

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F4

<400> 5737

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taaggaaaagg tcccgccctt ttctccgac atccacaagg ggggaaggga aaacacgtac 120

attcaaccgg cggaataat ggctcgggt ccgggtccgg cgacgacgac cgccgccgtc 180

atcctatgcc tatggtcgt cctctcctgt gccgaggctg acgaccgaa cctccccgac 240

tacgtcatcc agggccggt gtactgacg acctgccgag ccgggttcgt gaccaacgtc 300

accgagtaca tcgcgggcgc caaggtagg ctggagtga agcacttcgg caccggcaag 360

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gacagcca 428

<210> 5738

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F5

<400> 5738

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ccacgcgtcc gggctgtgca ggagggcatgg gcatcggcgt gcggcgccac tgggaagcag 120
acaatcctca tacccaaggg tgacttcctt gtcggacaac tcaacttcac aggcccttgc 180
aagggcgacg tgaccatcca ggtggatggc aatctgctgg cgaccacgga cctaagccag 240
tacaaggacc atggtaattg gatcgagatt ctacgcgtgg ataacctggt catcaccggc 300
aagggaaacc ttgacgggca gggcccagcc gtgtggagca agaactcctg caccaagaag 360
tacgactgca agatccttcc caactcgtg gtgatggact tcgtgaacaa cggggaagtg 420
tccggggtc 429

<210> 5739
<211> 423
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-061-Q1-E1-F6

<400> 5739

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atctactgcg acaactgccg cgccgggttc gagacaaacg tgtcccacgc catccaaggc 180
gcgacggtgg agatggagtg ccgccacttc gagtcgcagc aggtccacga caaggcggag 240
gcgacgacgg gccccggcgg ctggtacagg atggagatca gcggcgacca ccaggacgag 300
atctgcgacg tgcgcctgct caagagcccc gagggcgact gcgccgagat cgaccactcc 360
cgcgaccgct gccgcgtcnc gctcaccgc aacgacggca tcaagcagag cggcgtccgc 420
tac 423

<210> 5740
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F7

<400> 5740

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caacagccag ctgcgaaaaa taatgaagag ccgcagcatg gcatcatcgg ccgcgtcttt 120

ggtgctagcc ctccgcctag tggcggccac cgccccacag gtagcggagg caaagaagaa 180
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gacgctgtgc gagggcaaga aggggacgga cctggtcgtg tgcaaggagt cctgcgcgct 300
ctcccagcag tccaacctgg tgctgtacgg caggatccag tgcaagggca aatgcaccga 360
gcagaagggc atcacggcgc cgggcatg 388

<210> 5741
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F8

<400> 5741

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cattgtgtcc accgatatgg cacaggcaag ggaatgcgag aagtacagtg agcgatttgt 180
tggggcatgc atgatcgcag acaactgcgc caatgtgtgc cgcggtgagg gcttcttggc 240
cggcagggtgc agcaccttcc gccgccgctg catctgcact aggcagtgtc aaacaagatc 300
gctcgatcgc ttgccatgca tcgacaacct attcttaata acgttcatta tctcgttctt 360
atztatgacg aatgtcatgt atgttctggt gactgtcatg tatattctga tgactgtcat 420
gtatcttggt catgt 435

<210> 5742
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F9

<400> 5742

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gtcaatggat ggcacaccat gctctggatc tccatcatgc cgggtggtgat catcctgtcg 180
gtggggacga agctgcaggg catcatctgc cgcattggca tcgacatcac ggagcggccac 240

gccgtcatcc agggcatccc gatggtgcaa gtcagcgact cctacttctg gttcgcacgc 300
cccaccttcg tgetcttctt catccacttc accctcttcc agaatggctt ccagatcatc 360
tacttctctt ggattctgta tgagtacggc atggactcgt gcttcaacga ctccgaagaa 420
ttcgtctttg cagactctg 440

<210> 5743
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G1

<400> 5743

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gtgcgtcctt ctaaatacacc aaatggggcg cctccggtat tggtaatata gacatcaaga 180
aggctgttca agatgtatgg gcatcgcat gagacggtac tggtaaagcag acaatcgtca 240
gacttacggg tgacttctt gtctgacagg tcaacttcac aggcccttgc atggggggacg 300
tgacgatcca gctggatgtc aaactgctga cgaccacggc cgtactccat tacaaggacc 360
ataggatatg gatcaagatt 380

<210> 5744
<211> 460
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G10

<400> 5744

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tgtcctcact ggcagcctcc aggacaactt ctttgccagt tttgctctgg gttggctgat 180
caccaacggt gctggtcttg catcttacct cattgatact gtccgcagaa ggatgatgat 240
gacttctggt gaggctgtca agtacaagag ctcatgggac gcattccagc agatccttaa 300
gaaggaaggc cccaagtccc tgttcaaggg tgctggtgct aacattcttc gtgccattgc 360

tggcgctggt gtgctttctg gctacgacca gctccagatc ctcttcttcg gaaagaagta 420
 cggtccggg ggtgcttaaa tggagaaaaa tgatgacgaa 460

<210> 5745
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G11

<400> 5745

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 agcgacgacg tcgtgaacgg gcccctcctg accgagaaga tccaggcgaa gaagacgctg 180
 atcgtggggc cggacgagga gttcaagacc gtgcagtccg ccatcgacgc ggtgcccgcc 240
 ggcaacgccg agtgggtcat cgtccacctc cgctctggcc tgcacagggg caaagttgtg 300
 ataccggaga acaagccctt catcttcgtg aggggcaacg gcaaaggccg gacctccatc 360
 tcccacgagt ccgcctcttc cgacaacgcc gagtccgccg cgttcaccgt gaactcggac 420
 aacgtcatcg t 431

<210> 5746
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H11

<400> 5746

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 ttctgccgac ccagttgatt cccgacgaca acgaaggaaa ggtgctgcgt gttaagctca 120
 tcatgaaaga aggggtgaag aacttcaacc cggtttatct ctttgacgaa ggatcgacca 180
 tcagctgggt gccttgtgga agaaagctca catgctctta ccctggcatc aaattttcct 240
 atggcccgga cacttacttc ggaaacgagg tatctgttct ggagatggat gggcaattcg 300
 acagactaga tgagctcatc tacgtggaga gccatctaag caacctttca accaagttct 360
 acggagaggt gacacaacaa atgctaaagc atgcagactt cccaggtagc aacaacggga 420

<210> 5747
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A5

<400> 5747

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aaagctcaca tgctcttacc ctggcatcaa attttcctat ggcccggaca cttacttcgg  180
aaacgaggta tctgttctgg agatggatgg gcaattcgac agactagatg agctcatcta  240
cgtggagagc catctaagca acctttcaac caagttctac ggagaggtga cacaacaaat  300
gctaaagcat gcagacttcc caggtagcaa caacgggaca ggtctcttcc agaccatcat  360
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<210> 5748
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G1

<400> 5748

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gatgctctgc gtccagtgc tgatcttccg ttggatgtac atctgatgat tgtggaacct   60
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cagacatcga ccatccattt gcaccgaaca gtcaatcaga ttaaaagtct aggagcaaag  180
gcaggagttg ttttgaatcc agcgactcca ctactgcaa ttgattacgt tcttgatggt  240
gttgacctgg tgctgattat gtctgtgaat cctgggtttg gtggccagag ctttatcgag  300
agtcaagtaa agaaaattgc agaactgaga aggttatgtg cagagaaggg agtgaacccc  360
tggaattgagg ttgatggtgg tgttggtccg aaaaatg                                397
  
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<210> 5749
 <211> 416

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-D1

 <400> 5749

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 aacaagccaa acaaccagtg ggctgctagc cgagacaggg gatagattga gagagaggcg 120
 cgcagatggc gacgccgtcg tcgtcgcttt gctccagctt cgcctccctg cggaccgcct 180
 ccatcgggcca cccccgtggc atcgctcct ccacgctcag gaaggcattc catgtgaggg 240
 catcagctcg ggttgacaag ttctcaaaga gtgacatcat cgtgtcccct tcgattctgt 300
 ctgcaaactt tgcgaagctt ggtgatcagg taaaagctgt ggaggtggca ggatgcgact 360
 ggattcatgt cgatgtcatg gacgggcgct ttgtgccaaa catcacaatt ggaccc 416

<210> 5750
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-B6

 <400> 5750

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 ggctcgagcg agggggggcg gagggcgagat ggaccacgcg gcggacgcgc accggacgga 120
 cctgatgacc atcacgcggc acgtgctgaa cgagcagagc cggaaccccg agtcccgcgg 180
 cgacttcacc atcctgtctt cccacatcgt cctcggctgc aagttcgtcg cctccgccgt 240
 caacaaggcc gggctcgccc agctcatcgg gtcgcccggc gagaccaacg tgcagggaga 300
 ggagcagaag aagctggacg tcctgtccaa cgaggtgttc gtcaaggccc tcgtcagcag 360
 cggtcgcacc tgcgtccttg tgtccganga ggacgaggaa gcaacg 406

<210> 5751
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-C10

<400> 5751

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gagatacatt ggaagtatgg ttgctgacgt gcaccgtacc ttgctatacg gcggtgtggt 180

tttgtaccct gctgacgaga agaaccctaaa cggaagctc cgtatcctgt acgaagtttt 240

ccccatgtcg ttcctaattgg agcaggcagg aggccagtcc ttcacaggca aagaacgggc 300

tcttgatctg gtcccaacca agatccacga caggccccg atattcctcg gaagctacga 360

cgacgtggag gagatcaaag cgttgtagc cgagcaggcg aagtcgagct cggcttcac 420

ctaag 425

<210> 5752

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H7

<400> 5752

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gctcccgcca agggcgccga catcccgacc tatgtcgtcg gcgtcaacga gggcgactac 120

gaccacagcg tcgccgacat catcagcaac gcgtcctgca cgaccaactg cctcgcgcca 180

ttcgtcaaga tcttggacga ggagttcgga atcgtgaagg ggaccatgac gacgacgcac 240

tcgtacaccg gcgaccagag gctgctggac gcgtcccacc gcgacctccg gcgggccccg 300

gcggcgccgc tgaacatcgt gccgacgagc acgggcgccg ccaaggccgt ggcgctggtg 360

ctgccgc 367

<210> 5753

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-D12

<400> 5753

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caagagcacc ttcatgcgcc ggctcaccag cgtcttcggt ggccgcccgg agccgccc aa 120
 gggcggggaac ccggactcca acacgctcat cagtgcacac acgacagtga tatgcctcga 180
 cgactaccat tccctggaca ggaacggcag gaaggagaaa ggtgtgaccg ccctcgaccc 240
 tagggccaac aactttgatc tcatgtatga gcaggtgaag gcgatcaagg aaggccaggc 300
 agtcgagaag cccatctaca accatgtcac tggcctctc gaccctccgg agcttatcgc 360
 gccaccaaag attttcgtca ttgaaggctc gcaccaatg ttcgatgagc ga 412

<210> 5754
 <211> 353
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-C6

<400> 5754
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 cacgcagctc tcgccgcctc ccgcaccccc gccggcgccc ggctgcacag cagggcgccg 120
 gcgtcgtcca ggcacggcgt gcagaggctg gacttcgccg acttctccgg gctcaggccg 180
 gggtcgtgct ccgtgagcgc tggcgcgccg gaggcgtcct tctccgacgt ccttggcgcg 240
 cagctcgtcg ccaaggccac cggggagaac gccgtgaggg cggccgcaga ggcaagctg 300
 aaggtggcga tcaacggctt cggccgcacg ggccggaact tcctccgggtg ctg 353

<210> 5755
 <211> 374
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-015-Q1-E1-C5

<400> 5755
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 cgatcaacgg cttcggccgc atcggccgga acttctccg gtgctggcac ggccgcgagg 180
 actcgccgat cgacgtcgtc gtcgtgaacg acagcggaag cgtcaggaac gcgtcncacc 240
 tcctcaagta cgactcgatg ctcggcacct tcaaggccga cgtcaagatc gtggacgaca 300

cgaccatcag cgtcgacggc aagcccatca cggtcgtctc cagcagggac ccgctcaage 360
tcccatgggg tgag 374

<210> 5756
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D11

<400> 5756

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ggagattact ggcttcagtg ctccggttaag agagcagatc tacaaggtag cttcagtga 120
cctgtgctcc aatatcactg gtcaaatect tgcgagcctc gtcataatc caccaaagg 180
tggggacgaa tcatatgctt cctacaaggc agagaaagat ggaatccttc agtcttttagc 240
tcgccgtgca aaggcactgg aagatgcatt caacacgctt gagggatttt catgtaacaa 300
ggctgaagga gcaatgtacc ttttcctca gatccatctg ccacataagg caattgaggc 360
tgctaaagct gccaaagaa cacctgatgc attctatgcg ctccgctc 407

<210> 5757
<211> 379
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-018-Q1-E1-C10

<400> 5757

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ggggtttata cgactggaaa tccttatgga atagcagagg atatcgtgtt cagcatgcca 120
tgcagatcga aggggtgatgg tgattacgaa ctggctagtg atgtgttgat ggacatt 180
ctctgggaac ggattaaaaa gagcgaagct gaattgcttg ctgagaagaa 240
catcttacag gagaggggaa tgcattttgt gatcttccgg aagataccat gctaccagga 300
gaagtgtagt ttagttacag aagcaacagc agtggaatgc attttgccaa tacattagct 360
gagacttgan acatctgct 379

<210> 5758
 <211> 371
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-B7

 <400> 5758

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 gtctctccca agcccagatg gcgcaagctc atggacgaga tggcggtcgt ggccacggag 180
 gagtaccgct ccgtcgtcgt caaggaggcg cgcttcgtcg agtacttcag atcggtaca 240
 ccggagaccg agtacgggag gatgaacatc ggcagccggc cagccaagat gaggcccggc 300
 ggcggcatca cgaccctgcg cgccatcccc tggatcttct cgtggacca gaccagggtc 360
 cactccccgt g 371

<210> 5759
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-G7

 <400> 5759

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 ctgttttccc tatgcatatg taatttcctg cctctttata ttcactcttg ttgtcaagtc 180
 caagtagttc gccgacgaga acaagcccg cggactggtc aagctgaacc cggcgagcga 240
 gtacccgccc ggctggaag acacgctcat cctcaccatg aagggcacg ccgccggcat 300
 gcagaacact ggctacgcg cttctcttca ctcacctgca gactgcaccg caataatcag 360
 cttccggatg gtggcgtatt gtcagttttg gatggaaatg ccgaactggc agcgtctgtg 420
 ttcctatgc atatg 435

<210> 5760
 <211> 412

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-H11

 <400> 5760

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 acagcagctt ctctccaga tcgctgggca caaggatatt cttgaaggcg atccattcct 180
 gaagcagggg ctggtgctgc gcaacccta catcaccacc ctgaacgtgt tccaggccta 240
 cacgctgaag cggataaggg accccaactt caaggtagcg cccagccgc cgctgtccaa 300
 ggagttcgcc gacgagaaca agcccgccgg actggtcaag ctgaaaccgg cgaacaatt 360
 tcccccccg gcttgaaga cacgctcatc ctcaccatga agggcatcgc cg 412

<210> 5761
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-B6

 <400> 5761

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 ccctgaacgt gttccaggcc tacacgctga agcggataag ggacccaac ttcaaggatga 180
 cgccccagcc gccgctgtcc aaggagttag cgcagagaa caagcccgcc ggactggtca 240
 agctgaaccc ggcgagcgag taccgcccc gcttgaaga cacgctcatc ctcaccatga 300
 agggcatcgc cgccggcatg cagaacactg gctacgggc ttctcttcac tcacctgcag 360
 agtgcaccgc 370

<210> 5762
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-F6

 <400> 5762

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aaggatattc ttgaaggcga tccattcctg aagcaggggc tgggtgctgcg caaccctac 180
atcaccaccc tgaacgtgtt ccaggcctac acgctgaagc ggataaggga ccccaacttc 240
aaggtgacgc cccagccgcc gctgtccaag gagttcgccg acgagaacaa gcccgccgga 300
ctgggtcaagc tgaaccggc gagcgagtac ccgcccggcc tggaagacac gctcatcctc 360
accatgaaag gcatccccgc cggcatgcag aaca 394

<210> 5763
<211> 392
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-024-Q1-E1-A11
<400> 5763

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caagcccgcc ggactgggtca agctgaaccc ggcgagcgag taccgccccg gcctggaaga 180
cacgctcatc ctcacatga agggcatcgc cgccggcatg cagaacactg gctaggcggc 240
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tcagttttgg atggaaatgc cgaactggca gcgtctgttt tccctatgca tatgtaattt 360
cctgcctctt tatattcact cttgtgggtca ag 392

<210> 5764
<211> 337
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-031-Q1-E1-H12
<400> 5764

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acagcagctt ctcggcaata tcgcagggca gaacgatata ctatgaacgc gatgcattcc 180

tgaagcaggg gctggtgcag cgcaaaccct atatcaccag cctgaacgtg ttccaggcct 240
acacgctgaa gcggataagg gaccccaact tcaagggtgac gcccacatccg ccgctgtcca 300
aggaattcgc cgacgagaac aagcccgcgc gactggt 337

<210> 5765
<211> 390
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-020-Q1-E1-B11
<400> 5765

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ctcgaacgca ggtctgaggc agaagcaagt catcttcgtc accagcaaca ggaggagcgg 180
cggcggcagg aggcacggag gggcaaggag cttccaggtc tcgtgctccg tcgacaagcc 240
ggtggtgatt ggcctggcgg cagactcagg gtgcggcaag agcaccttca tgcgccggct 300
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gctcatcagt gacaccacga cagtgatatg 390

<210> 5766
<211> 288
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-F2
<400> 5766

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cccaaggctc taaaatgtga gtatgcagtc cgtggggaga ttgtcatcca tgggcagcgc 120
ctgcagcaac aactacaaac acaggcaggg tctcttcctt ttgatgagat cctctattgc 180
aacattggga atccccaatc tcttggtcag caacctgtga cattcttcaa ggaagttctt 240
gctctttgtt atcatccgtg cctcttgga aaagaggaaa ccacatca 288

<210> 5767
<211> 408

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-F5

 <400> 5767

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 acggcgtggg caagaggatc aggcttcctt acaccagaaa gatcatcgac gccatccact 180
 ccggcgagct cctcaccgcc aactaccaga agaccgaggt gtttggcctg gagatcccca 240
 ctgagatcaa cggcgtgccg tcggaaatcc tcgaccgat caacacctgg acggacaagg 300
 ccgcgtacaa ggagaatctc ctgaggctcg gcgggctctt caagaagaac ttcgaagtgt 360
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<210> 5768
 <211> 364
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-A4

 <400> 5768

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 gcattctgaa tgcactgctg aacaagcata tacctggagt cagggccgtt caatctttgc 180
 cagtggcagt ccatttgccc ccgtggagta cgaaggaaag acttttgtgc ctgggcagtc 240
 gaacaatgcc tacattttcc ctggactcgg cctcggctct gtgatctctg gagccgtccg 300
 tgtccacgag gacatgcttc tcgccgcctc gaaagcgcta gctgatcagg ccacacagga 360
 caac 364

<210> 5769
 <211> 393
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-D11

<400> 5769

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ctgtgttact gatggtgagc gaatcttggg acttggagat ttgggttgtc agggaatggg 120
aattcctgta ggcaaacttg ctctatacac tgctctagga ggagttgacc catcagtttg 180
cttgctatc acaattgatg ttggtacaaa taacgagaaa ctgcttaatg atgagttcta 240
cattggactc cggcaaaaac gtgcgactgg cgaggagtat gatgagctta ttgaagagtt 300
catgtctgct gttaagcaat tctatgggta gaaagtcctc attcagtttg aggactttgc 360
caatcacaat gcctttgatt tgcttgaaaa ata 393

<210> 5770

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-D11

<400> 5770

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gctggaactg gtattgcaga acttattgct cttgagattt cgaaacagac gaatgctcca 120
attgaagagt gccgcaagaa ggtttggtg gtggactcaa agggtttgat tgttgactct 180
cgtaaaggct cccttcagcc attcaagaaa ccttgggcgc atgagcacga gcccttgaaa 240
accttgatg atgctgttca gtccatcaaa cctacagttc tgatcgggac atctggagtt 300
ggaagaacat tcacaaaaga aatcattgag gccatgtctt ccttcaacga gaggcctatc 360
atcttttcac tgtcaaacc cactcgcgt tctgaatgca ctgctgaaca agcatata 418

<210> 5771

<211> 414

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-027-Q1-E1-C5

<400> 5771

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ttctgatcgg gacatctgga gttggaagaa cattcacaaa agaaatcatt gaggccatgt 120

cttccttcaa cgagaggcct atcatctttt cactgtcaaa cccaacctcg cattctgaat 180
gcactgctga acaagcatat acatggagtc agggccgttc aatctttgcc agtggcagtc 240
catttgcccc cgtggagtac gaaggaaaga cttttgtgcc tgggcagtcg aacaatgcct 300
acattttccc tggactcggc ctcggtcttg tgatctctgg agccgtccgt gtccacgagg 360
aatgcntct tcgcggcttc aaaaccgcta cctgatcagg ccacacagga caac 414

<210> 5772

<211> 347

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G7

<400> 5772

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ttgaagagtg ccgcaagaag gtttggctgg tggactcaaa gggtttgatt gttgactctc 120
gtaaaggctc ccttcagcca ttcaagaaac cttgggcgca tgagcacgag cccttgaaaa 180
ccttgatatga tgctgttcag tccatcaaac ctacagttct gatcgggaca tctggagttg 240
gaagaacatt cacaaaagaa atcattgagg ccatgtcttc cttcaacgag aggcctatca 300
tcttttcact gtcaaaccba acctcgcatc ctgaatgcac tgctgaa 347

<210> 5773

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G9

<400> 5773

aggaacgaac gacctgacgc agatgacctt tgggtacagc agggatgatg tgggaaagt 60
cattcccgtc tatcttgctc agggcatcct ccaacatgac cccttcgagg tcctggacca 120
gaggggagtg ggcgagctgg tgaagtttgc tacagagagg ggccgcaaag ctaggcctaa 180
cttgaagggtg ggcatttgtg gagaacacgg tggagagcct tcgtctgtgg ccttcttcgc 240
gaaggctggg ctggattacg tttcttgctc ccctttcagg gttccgattg ctaggctagc 300
tgcagctcag gtgcttgtct gaggctgcct cctcgttggc aaccggattg cctgctgctg 360

gtggatgtgg tgatcaacag tattattaca gagccatg

398

<210> 5774

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E8

<400> 5774

agggcagagg gcaggaaaag attgggatct aacacagcag tccaagggaa cgtggatcct 60

ggtgttcttt ttggatccaa agagtttata agcaggcgga tttacgacac tgtgcagaag 120

gctggcaatg ttggacatgt actgaacctt ggccatggca tcaaggttgg aactccggag 180

gaaaatgttg ctcaacttctt cgaggctgca aaagggatca gatactaaag aaccttgcac 240

ggttctttcc tttctccaaa tcggcagaag ttgtagagtc ggcggtcgag gatagatgca 300

gaaagccatg tgcagtatag agtccttgaa aacatttttg tgactgattc tgtctgtcgc 360

aattcaagtt ccggtttcaa tgtgatattg taagcagatt tgagacg 407

<210> 5775

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E6

<400> 5775

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actcacacct cactttttct gctaaattgt ggcagtgggtg ataattgata tgcacagact 120

gtacttattt aatgactatg aaataccatt taacacagct attgtgcctg acagggtaaa 180

tctaccaagg acacacatag ttaagccttg ctacagctgac gactgctaag gaatttctgt 240

taagtgcagt ttgggggggtc ttctcaacca ttgcttgact taaggcaaca cattagagga 300

tattcatcag catcagaggc aattcttccc aatctgattt gagaaaaaaaa tttgttggca 360

acgaaaaaatt agtgttttct tgctgaatct tgggggggc 398

<210> 5776

<211> 418

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-H8

 <400> 5776

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 ggggtgcatgg agctcttgct aaggagcgga gtcactgtta aaggtaagcg ggcagttgtg 120
 gttggctcgca gcaacatcgt cgggctacct gtaggggtgc tccttctgaa ggcagatgcg 180
 accgtatctg ttgtgcactc gcggaccctc gatcctgaaa gcattgtacg cgaagctgac 240
 atagtcacgc cggcagctgg gcaggctatg atgatcaaag gtgactggat caagccaggt 300
 gctgcgggtca tcgatgtctt tactaactcc atcgatgacc ctaccgggaa gtccgggtac 360
 cggctcgtcg gcgatgtgga tttcgcacgc gcgagcaatg ttgctgggta cctgactc 418

<210> 5777
 <211> 398
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-H7

 <400> 5777

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 gcagcacgtt cacgttgacc accagagctc aaacgcacga gccgcccacg atcagccagc 120
 cgagcgatca tcaggagagt tcaggctcgtg caagaggggc ggggtgaaaca aaacgcacgc 180
 atccatccgt cggctcgcca atcatgattc tgggcttggg aggatgctgc ggagctgccg 240
 ccgcccgcgc cgccgtgtcg cgggctgccg tcggcaagca attgcgaggc catctacagg 300
 ccaactgagcg gcagcagttt tttttttggg caagtgatga gcacaagatg aacaagggag 360
 gcgagcaggg agcggcgcca gcagctgggg gtaaggag 398

<210> 5778
 <211> 398
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-G5

 <400> 5778

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cagccgtatt gtcccgactc ctgacccta ccatcctcg cctgctgcat ccatggcgac 120
gggggcggcg ctctccaccg ccgccaatcc cagggggggc taccgggtccc gcgcttcgct 180
gggcaatccc gtgaacgggc ttggcctcag catggggcgc gagcgcccc agctgagcat 240
tgtgtgccag acggcgagca ccatctcgc ccaccgcctc tctcacatgg acaatccgaa 300
gctgatgaac ctctctcttc tcttttcat ctctttccc accgtccgca ttgtcctccc 360
ccatggcgcc ttcttctctc ctgccggctc ccggaacc 398

<210> 5779
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G6

<400> 5779

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ctgtacaaca agaagaacga gtgggagaag atgcagctgg ggaagaccgc cgtcgccggg 120
gtgggcgcca ccaaggagga ggcgatggac agggggagct cgcacacgca ctcccacgcc 180
caatcacact cgcactcgtg gggcgagacg cgcacgccag agtcggagat cgtggacaac 240
gacccgttcc cggagctgga ctcgttcccg gcgttccagg acccggcgat gatgatgacg 300
gtgccaagg aggatcattt tttttgctgc agcgccaaga gcggcaacct gtctgtggac 360
ctcagctacg acgacatcca cggcatgtac agcggcctcg acatgccgcc gccgccccgg 420
gaggacttct acccctcgct cctccggt 448

<210> 5780
<211> 351
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G7

<400> 5780

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acaacaactc aattcctatc gaattccttc ctatcgaatt cctatagtaa aattcctata 120

ggaggggaacg tacacacggt gtacacatta taggggggtga aacatattca ttaacttaag 180
catactcctt tttttattta atgagttgat attaattaaa tatctttttt tttagatttt 240
tgcaaaggtt tcatttacgc ctaatccata tcgagtagac cctgtcgttg tgagaattct 300
taattcatga tttgtttttt tttacttatg tcaccacaca cataaactaa a 351

<210> 5781

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G8

<400> 5781

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tcgagaactc gcactacgac taccacaaga tgaagctgcg gatgcagacc gaaatccagg 120
gcgtggtcga gcggatggaa gccacaaaga agatgtgggt ataggctcct gttaacaatt 180
tcatgttgct gctgcttaat gtttcgggta tagactccag ctaacaactg cctgatgctg 240
ctgctgctgc tgaatacctg agatttggtg ttgttcgtta ggagagtgtc cattgttgta 300
ttttttttca ccatcttggtg ttataatcta aatgctgttg taacttgcaa gtggatgcct 360
agccttgctg ttgctgatat aacttggcag cattcactca gttaatc 407

<210> 5782

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G9

<400> 5782

cacgcgtcca atacaacgcg caagcaggtg agagcctgaa catgagataa ctgagcccgt 60
acctggaggc cgtgggctct gacttcacgg gcggcgccaa cttcgccatc tccggctcct 120
ccacgcggcc ccgcaacgtc cccttcgcgc tccacgtggg ggtccagcag ttctgcacc 180
tgaagcagcg ctgcctcgac ctgcgcgccc acggcgggac ggctcccgtc gacgccgacg 240
gcttccggaa cgcgctctac ctcatcgaca tcggccagaa cgacctgtcc gccgcattcg 300
gtagcggagc gccctacgac tacttttttt atcataggat cccggctatc gtgtcagaca 360

taaaggacgc tatcatggta cctctgcaaa tagtatcact caccatagat tagaacttcc 420
aactacggcc ttgtgc 435

<210> 5783
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H1

<400> 5783

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ggcatcggcc ccaacgccag cggcaccgca ccaccacgcc cgtcggcgac atgaatccgc 120
ccgcgggagc cgcgtccacc ggcgaggag gccaggccgg ggcgccctgc gcagcccggg 180
agtacgtgca ctacccgagg ctctcgccag aggaggtggc cccgcccccg ccccgccctt 240
atcacgccgc caccgccgcg ccgtccgcct acggaggcaa cccctacatc tactcccccg 300
ccggcgggcg cgccacctcc ttttttttat atgatggact ccgtgaagga cgtgctcggc 360
aagatgggga agaggtttgg ccaggccgcc cgcaagaccg agaccatcac cgg 413

<210> 5784
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H10

<400> 5784

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acgtgtcgga cctcctggcg ctgcgctgc ggagtgccg ccgcggggcg gccccggagc 120
tggggcgga tgcgggctg ctgcgctga tccaggggt ggagcgggag atcgtgccg 180
agcgggagag gcttgagggt atcctggagg acgtgggcat caacgacccc gccagctgca 240
gcgacgagat cgagacctg gagcgggaga tcggcgaccg cgtcgccgag aggtggacgt 300
cgtgatgat cgccctcgtc cgttttttct gctacgcaa gtgcgtcctc ttcagtgccg 360
ccacgccgcg gcccgtaggac tccaagggtg 389

<223> Clone ID: LIB189-034-Q1-E1-H3

<400> 5787

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tacgggaatt tttgtacgcg ctacaaaacg tcaacatcct cttcacaatc ataccacaag 120
gggaggactg cctaatacatt tcaaagtaac tgggggggag acttatccta acatcagaca 180
tgagccaaat cttcaagggtc ctgttatcac gggtatatct gatcaaaata ctgttgactc 240
tatcagccac agtcaaaatc ccacctccac caacttggtg cccgacgtct tagacaaagc 300
taccatccat gaattcggtt tttttcagca cattaccgat cgaaagcatt atgctataca 360
cgctctcaat gatccactct taagtttaca tgatcactac cttatacct 409

<210> 5788

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H4

<400> 5788

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gccgcctacg gggaagcagc caacgtgttc ggcaagacca agaagagggc gggcttcatc 120
tcctacgtcg gcgacggggt ggggctgctg atcccgctcca agtggaaccc cagcaaggag 180
cgggagttcc ccgggcaggt gctccgctac gacgacaact tcgacgccaa caccaacgtg 240
tccgtcatca tccacccccc ctccaagaag gccatcacgc agtacgggtc ccccgaggag 300
ttcttctctt atgtcgacta cctgctccgc aaccacgcct acggcgggcaa caccgactcc 360
cagggcgggt tccagaccga cgccctggcc accccaacc ttctggagag ctccaccccc 420
cttg 424

<210> 5789

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H5

<400> 5789

5787 5788 5789

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 atttgtcatt tgctgggtgct caaagccggc ttggtttctt cgaaggatca gcatctactc 120
 gtgagtgtgg actttgtcac atctgatatc aggggtggga aatctttatc cgagatggcg 180
 ctgcaaaaca ttgggtgcttc aaacagggat gatgccttct acaggtacaa gatgcccaga 240
 atgattacca agatagaagg cctgtggaat ggtatcaaga caaatgttgt gaacatgggt 300
 gacatagcaa aagcacttgt tatttttagc ttctacaca accaagtact ttggatgtga 360
 gcttgggtgca cagtccaaat ttgatgagaa gacaaggatt tccttgggta atggggctca 420
 tgatactgca aagctggc 438

<210> 5790
 <211> 343
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-034-Q1-E1-H6
 <400> 5790

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 ggagcggggc ttaccgtctg tctgaaacca caggcgggga tacatcaciaa gccacacaggc 180
 gctttatttg ccatcgtaga ccaaactttc agtgctgctt acatcaccac catgcacaca 240
 ttgactccag ccttattcac agctgtcggc ctcacgacct ctccaagttg tacaataaga 300
 tccacaacac cttatttttt ttttctctca cgtaccctac gta 343

<210> 5791
 <211> 355
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-034-Q1-E1-G3
 <400> 5791

acttggttcg tgagctatat gtgactattt agcaacttca gaattcgcac tgcaaattat 60
 gtgcgctaca caaagatcac ttccaacatg aatgaacgct ttccaggggg gacatcaciaa 120
 aagctcgatg tgaatgaggg ggggggtatta tttgccctga ggaaatggct acagcaaaga 180

aactgctcga tgggcatctg ttccatgtgc attgtctaag acaaacagga gaacaggctg 240
aacaagacgt tcctctacgg cttctccatg ggagcttcac ctccacagga acgattctct 300
ctttttttta tgtcccgtgc tgcatgcccc aacgtgcaat ggttattgta tacta 355

<210> 5792
<211> 154
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-E12
<400> 5792

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cgaaccctcg cgtcttcttc gacatcacgc tcggcggcgc cccggcgggc cggatcctca 120
tggaggggta cccaaccac gtgcccaaga ccgc 154

<210> 5793
<211> 407
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-E2
<400> 5793

ccacgcgtac gcagacgcgt gggcggacgc gtgggcgcga cgtggaagtt cgacacggag 60
gcgctgcccc acgacctcgt caagcgcggg ctggccgtgc gcggggagga cggggagctg 120
gggcgtggcc atcaaggact acccctacgc ccacgggggg ctctgtgtct gggactccat 180
caagcagtgg gcgtccgagt acgtcaacgt ctactacaag tccgacgagg ccgtggccgc 240
cgaccccgag ctgagggcgt tctgggacga ggtgcgcaac gtggggcacg gcgacaagaa 300
ggacgagccg tgggtggccct tgtcttttac ccgcgacagc ctggtggaga cgctgaccac 360
catcatgtgg gtcacctccg gccaccactc ggccgtcaac ttcgggc 407

<210> 5794
<211> 378
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-E4

<400> 5794

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gcactccacg gggcagggcc accccgtcaa gctcgtgccc tacaaccg actaccacga 120
ggaggggggtg ctctggaccg agagccgcga cggggggggc ggcttccgct gcgtccgcat 180
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ccatgacggt accgagatcg tgctctggaa ctctgtcgag ggcgacaacc acccctggaa 300
gatcctccct tgggtgtattt tcttttgata ctactacctg gtaccctact cataattctg 360
ccggctgctg cgatcccc 378

<210> 5795

<211> 275

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E5

<400> 5795

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caagggattg ctaatttgat aatgacagcc aaacggagt ttaagaagtc agacgatggg 120
gtgcctgttc cacctcttct caaaacttcg gcgggggtgg gtgcattcct tgctgtttct 180
tccaacacac ggtaccacat tattaatgga ttacagcccc tggttgacgc ttcacctgtt 240
gccaaagcgtg tcccggctgc ctctttggca ttcac 275

<210> 5796

<211> 305

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E7

<400> 5796

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gaggacatca acacctgcac eggctacgtc caccagcgca tggagagctt cctcgccagg 120
gcgtgggtgat ccgccctgcg gccggcatct aggggggttc gtgcttgctt gcttgcccta 180
tgtatgtctg tggttgactg gttgttcacg gtcacacctac ttggctatct tacctgcacg 240

cactcatctc ctgtacgaat tacgaccata agctcggtac ctgaataaaa cttcttcgta 300
ctact 305

<210> 5797
<211> 289
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E8

<400> 5797

gggtgccggtg tcttctgtgc tattataaaa caaccggctg acaaccttgt gtctttcctg 60
aacaatgcc aaggagctac attgggagat cctgttaaca agcgggggct ctgggggtctc 120
ttcactagaa gacggcgggg gcgtatcgtc atcattggt aacctactgg tgctcactgg 180
ggaatttacc atgcattcaa actcatcggt tgactcccaa caactggagg tgttacacct 240
gccccatcag catacgtga attcaaagcc actccttgat ttttttttc 289

<210> 5798
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E9

<400> 5798

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gcatcgccgc tcaagctcct tgcgcggcat tctgtccat ccgcttaggt ggcgcgacgg 120
cgacgggggt cgctggactg gcggtggcct ctcagcggag cggagcgtcg cgccgctgcg 180
atggtcgcta tggcgaacag ggagcacgag ctggaggaga tccgggccat gaccactgaa 240
cacatgtaag atgaggtggt agacctcaag ggggagcttt tctgctccg ccttaaccgc 300
tctgctctcc acgagttcac cttttttttt tttccgcat ccgcaagacg attg 354

<210> 5799
<211> 118
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-F1

CCCTGCTCTC

<400> 5799

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gccatctccg tgcaögtcaa ctactgcggc aagcacgtgc cctccagctt ccactgcc 118

<210> 5800

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-F10

<400> 5800

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gaatcacatg tccaaatgca aatctaaaaa ggaaacaatg gcagaagatg attgtacaaa 120
catggggagt gcaacaaatg ctgaaactgc tgatttgggg agtcaatat ccagaaacac 180
agaaggccaa caagcagtac aagccgttga cgcaccacat ggcccttcca aaatggctaa 240
tggaatgat aagaatcatg attctcatat cgaagtgaca ccccatgagt tgggtttgaa 300
gagatcgaga acaaatggag ctatTTTTTT tatccatgat gagcgaaata ttcttaaaag 360
atcagatcaa tcagccttca ccaggttaca tacatctgtg gttccaatc 410

<210> 5801

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-F12

<400> 5801

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ccggctaccc agacatcgtc cgtgcgctcg ccaagagaca ggaccggaga ccatggcgga 120
ccagcggagc gacgaccaga tcgccgagtt caaggagggg gtcagcctct tcgacaagga 180
cggcgacggt tgcatcacia ccaaggagct cggaactgtc atgcgatcac tgggtcagaa 240
cccaaccgag gctgagctcc aggacatgat caacgacgtc gatgctgacg gcaacggcac 300
catcgacttc ccggagttcc tcaatcttat tgtccgcacg atgaaggaca ccgactccc 359

<210> 5802

<211> 315
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-F2

 <400> 5802

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 gccagatttt ataatccaag gaaacaatcc cgggttttcaa tgcaatgtgt accaatcata 120
 caaagggggc tcttggaaca gccagcaaaa taacgggggg catagcatat ccaacgaaca 180
 gcggccaaat taccactatt ataaactatc catggtgcac agcatccgaa caattaattc 240
 cccacagctc aaaaaccgat gctgaaccga acgaggaaga accctgagca tcacatacac 300
 tcagtaagca aacac 315

<210> 5803
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-F6

 <400> 5803

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 gtgatcgagc taactgagct ccgatacctc ctagctagga taccgccata ccacaagtcg 120
 tctgcacaag tttaggagtg acagcaacaa gagagggatg gcctctgccca ccgtgctcaa 180
 gtcctccttc cttcccaaga agtccgaatg gggcgccacc aggcaggccg ccgcgcccag 240
 gccgcccacc gtctccatgg tcgtccgcgc ctccgcctac gccgatgagc tcgtgaagac 300
 cgccaaaacg atcgcgtctt tttttttggg catcctggcc atggaccagt tcaacgcgac 360
 cttccggaag cggctggcgt ccatccggct g 391

<210> 5804
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-F8

 <400> 5804

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gctgccgtgg ttcaagacgg gcgtcatccc gcccgcgggc acctacaact actgggcccgg 120
gggggcacac tcttcgtctt caacatctcg ggggggggct tcgccgagca ccgccgcctc 180
tagtactggt acaacccggg ctccatgggc aaccagtact tctcggcct cgagaagttc 240
ctcgccggct ccggcgaccc ctctacccc ggcgggcccc tcttcaacct gctccgcttc 300
ggcaacaccg atattgactg atttgatctc aacctcaagg agatcaagaa tggcaggctc 360
gccatgctcg tcctctccg ttacttcac catgggctcg tcaa 404

<210> 5805
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-F9

<400> 5805

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caaatgctgg actaacttct cgctttttct atggactctt ttattttttt gtgtttgttt 120
tttgggtact tagttttttt tttgttcttg tctcggagtt tgggtgccct ttgatgaacg 180
aagactatgt ccacgggcac tcagatcaca tgctcatgg aatacaactc ccgcttttgc 240
ctcagtcgga gtctacatcg gagtttcagc ctctggaata ttaggaagtt gaatattttt 300
tcgcttcgga cgcttctttt tttttttttt tattcatatt cgagtcattt tctt 354

<210> 5806
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G10

<400> 5806

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ccgtgatgcc caaaagaagg tcttcccgta tgctgactac atcttcggca acgaaactga 120
ggcagggatc tttgccaaag tcagaggatg gaagacgggg aatattgagg agattgcttt 180
gaagatctct caacttcctt tggcttcagg caagcaaaag aggattgctg tgattactca 240

agggtgctgat ccactggttg ttgctgacga tgggaagggtg aaaacgttcc ctgttatcct 300
attgccaag gagaagcttg ttttttttta tttgccaagt gatgctttcg tttgaggctt 360
cctctcacac ttggttctag gcaagggcat 390

<210> 5807
<211> 389
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-G12
<400> 5807

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atcgagcttc ttttgacca caaggctgag gatgtcttgc aactgcggat caagctgcgg 120
ctgcggctca agctgcgggt gcggcaagaa gtaccctgac ctgtaggaga ggagcaccgc 180
cgcgaggcc accgtcgctc tcggcggtggc cccggagaag aaggccgcgc ccgagttcgt 240
cgaggccgcg gcggagtccg gcgaggccgc ccacggctgc agctgcggtg gcaactgcaa 300
gtgcgacccc tgcaactgct gatcacatcg attttttttt atggatatga ttattatcta 360
tctagcttgt ggtggtggtt gaacaataa 389

<210> 5808
<211> 298
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-E11
<400> 5808

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accactcatc gccagtgggt gcctgccgac cacgtctcgc cgccgccacc gccgcggtag 120
agaggggagg gacagggggg gaaacctggc ccacatcgat aggtacagca gggagggtgac 180
acgcaataga gataggggac cggagggcag ccggcccggg cccaacaccg aggggctcgt 240
gcgcaggacg ctgatgatgc tcctgtccct cgtctccttc agtccccctg ctggaccc 298

<210> 5809
<211> 412
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G2

<400> 5809

gcgtccgcaa ccacgtgggc agcggcacag aggtgcgacg taagaaaacg acgacgcagg 60

cgccacacat ggcatcccag ctctccgccg ccgtgccccg gttccacggc ctccggggct 120

ggggcggcgc ccaggtccgc ggtggcagca ctgggggtggg tgacggtgcg cacgaagagg 180

tcgtcgtcgc agggcatccg ctgcgactac atcgggtccg ccaccaacct gatcatgggtg 240

acgacgacga cgctgatgct gttcgcgggg cggttcgggc tggcgccgtc ggcgaaccgc 300

aaggcgaccg cggcgcttat attttttgcg cgcgactccg gcctgcatac cggtgacccc 360

gccgggttca ccctcgccga cacgctggcc tgctgcgccg tcgggcacat cc 412

<210> 5810

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C8

<400> 5810

gcgtccgcaa tcaacgatga atccggggag ccagcacagc ttgttattga gaggagagaa 60

gaaagaccat cagtgatgaa cgcttttcgag ttaatctcta cgtctcaggg cctcaatctc 120

gggaggctct tcgagaagca aacgggttct gtggaggagg aaacaagggt tgcgtcaagg 180

cttcttgcaa atgagatact gtcgaagatc taagcagcag caggacccat gggcttcaac 240

gttcagaagc ccaactataa gctgaagctg caaggggaga accctggaag gaaaagtcac 300

ctggccattg caacattttt tttttttcct gcttgtgcct agacttctg catgggtctgt 360

tgtgctgttc ttggaccctc tgtgctttag actgaaacca aagataaaa 409

<210> 5811

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C9

<400> 5811

ccatttgcaa gctgggggga taatttcatt accttcacga gcaagatggc gcccttcggt 180
acgagcttgt acacaggctt ctaaagccac acgattagct gctgcaccag ctgcatttcc 240
ccaacgatgt cctaaagtgc ctccaccaa ttgtaatacg gaatcatctc caaagatttc 300
ggtcagagct ggcatatgcc aaacatgaat attttttttt tcaccggtat aacacctggc 360
attgataccc agtcctg 377

<210> 5814
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D12

<400> 5814

ccggcggcac caccgtcacc acgcgtccgg aagataataa agaaagtccc tatagaagtc 60
ggcaactgca caggatttgc agtcaaccgt acattttttc cttacacaca gggttctcat 120
cttctagtta gggggggtat tgatgttttc agaattgacg gaggggggag cacctttggc 180
atgccaatgg gaccttttca actccaagat gtggctgggt atggagttgc cttggcagta 240
aaggatatct acgctgatgc ctttggacaa agaaatttgg actctgacct tgtggatttg 300
atggtaaagg atggacgaca cggaatgtt ttttttatag gttactacat ttatgacaag 360
ggtgggaagc caaagccaga tcct 384

<210> 5815
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D2

<400> 5815

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atcgcggtgt cggagcccat atcgttcaag aacccaagg cgcccggtgt cccgcgcctg 120
gcgcagggca cgtccacga cgagatgacg gtgacgggga ccagcggcta cgccatcgat 180
gaggcgtacc cgttcgtgga gtggggcgcc ctggtcgccg gcggcggtccg gcacaccgcg 240
cgcgcgcccc cggggacgct caccttcaac cgcggcagca tgtgcggcga gccggcgcg 300

accgtcgggt ggagggattt tctttttcat ccacaccgcc ttcctcaggg acctctggcc 360
 caacaaggag taccactacc ggatcgggca cgagctcccc gacgggtcgg tgggtgtgggc 420
 aagccct 427

<210> 5816
 <211> 271
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D3

<400> 5816

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 ggatacagcg gattcataaa ccgtcagagt gttaggacaa gatggtggcc aatggtgatg 120
 eggctgctag agggagcgcg gcggcaacta caggcgggcg tacgcctatg accacaagcg 180
 gtgctgctgc cggtcgaggg cgtgccagct caatgctcca attctacact gatgatgctg 240
 ccggccgcac aatgtcacta aacactgttc t 271

<210> 5817
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D4

<400> 5817

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 gccgccgccg ccgccgtca ccctccgagc gccttctcgc tctcctcgt actcctcggt 120
 tgcgcgctcc tcgcatcgg aggagcaacc atgggggggc acgtcctctg cggcgtcaag 180
 gagaacccag ccgcggccaa cagcgccgat tccgacgggc tcggccgctt cgccgtcgac 240
 cagcacaaca cgcgcgagaa cgccctgctg gagttcgtgc gcgtggtgga ggccaaggaa 300
 cacgtggtgg ccggcattta gtatttttct cacgctcgag gccgtcgagg ccgggaggaa 360
 gaagctctac catgccaacg tctgggtca 389

<210> 5818
 <211> 414
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D5

<400> 5818

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atgcacctcg ggctcaggaa ttcaagggga cttcaatctt aataatcttg aagatggttag 120

agtggcctca gcatttatgg ttgggttgtt ggtgtggtcg ttgatatttg caagccttgt 180

aaaaagatat aatcctttca ggcttattgg tgttggcttg ttagtgtgga ctatcgcaac 240

agctggttgt ggagtatcat ttgatttctg gtcaattact atatgccgca tgtttggttg 300

cgttggggaa tcttcatttt ttagtctcgc agctccattc attgatgaca atgcaccggt 360

agctcacaaa acagcatggc ttggtatgtt ccacatgtgt ttaccaactg ggat 414

<210> 5819

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D6

<400> 5819

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atctggggga ggacgacgtg gccgcctct tctccttcgc gcacagccac ctccgcgtca 120

agatggccca gtcgggtac tactattact gctgatgggt cgtccgccga tcgatcggcc 180

aatatggagg catggagcat atggcatcga tcgatgggtt tgtcactact ccatcgtcac 240

ttgtttgtca cagctgggtg ggttggtatgt gttgttgcta cttttttttt ttctctcacg 300

tccgggtgga tgtgtgttgt tattttactgt tacctaaaat catcacttcc acaaaaaaag 360

ggcggc 366

<210> 5820

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D7

<400> 5820

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 ttgtgtggac ctatggactc acctcatgga gaacattctg ccctgtatgc aagcgggact 120
 cagggtgctgg aacgtcagac cccctgtat caggggagag ccctttgctt tcatcatccg 180
 ccacacgctt gccggaatca actgtgttgg cttccttgcg gtctacagca ccagcctctc 240
 ccccatgac gatcaccag catccttttg ttgccgtcaa tatccccaa ttactctgtt 300
 ttaagttcca ctatccttct tttttttttt tctacgttt tatccaaact cat 353

<210> 5821

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D8

<400> 5821

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 gtggctttcg agaacacatc taccaatgtt gccgcctcgc aaatgcgcaa tgcgctcaac 120
 aggcgggccg acaccgtcac cgaccccgcc gaggggaggt acttcgagac ggaaatggac 180
 aacttcttcg ctctgttccg acgatacctc aatgacaagg ccaagggtag tgccattgac 240
 tggaaccgca tcgctcctcc caaggccgac caggctcgta gctacgatga cttggccaac 300
 accgaggtcg tctaataattt tttttttttg gcggtcgtta atcttaacgg tggctcgggt 360
 acctccatgg gttgccttgg cccaagtcc gtcattcagg tccctcaacg tatgtccttc 420
 ttggacttgt caatgcgcca aat 443

<210> 5822

<211> 413

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-034-Q1-E1-D9

<400> 5822

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 ccattgcctg tgtcacggag ggggtgccgt tcatcaatgg gagccccag aactctttg 120
 tgcctgggct gattgatctt gctatcaaga acaactgcgg gatcngtggt gacgacttca 180

agagtgggca gaccaagatg aaatcggtcc tggttgattt tcttggtggt gctggaataa 240
agcccacctc gattgtgagc tacaaccact tgggaaacaa cgacggcatg aacctgtctg 300
cccctcaaac attcaggtcc aattttttct ttatcagcaa cgtggtggat gacatggtct 360
caatcaatgc cattctccat gggcccggcg agcatcccga tcatgttggt gtc 413

<210> 5823
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E1

<400> 5823

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acattaagtt ctgcaacgtc tgcagcagcc tccagattgc cattcgggtg tggaccatcc 120
gggtgtggct cactagatga ccaagatgcc aggggggggg gaaatctgta tcgcctgctc 180
ctacttttat ctaaggtttc tcagaaggaa aatccatctc caattcctga atataacagt 240
gccatagaga atgaacgtgg taccaccgat gaacttgccc ttgcgctgta tggaatgacc 300
tctctgctag aattttctttt ttttctttct gtcaatcctg agcttccacc gggagtccca 360
acagcagttg cttcttctgc catcggattt aaccaatcgt atttt 405

<210> 5824
<211> 277
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E10

<400> 5824

cacgcgtcca acagatgtgg ctgctagttt gtttgggtatt catggtacac catctccaag 60
ctcagttttg gtagatcctc gatatgaaat tgtgaagatg gcagaaatgc agccatgtgc 120
agagggggca caaaaagaag aacagatact aaagtggggg gcgcagattg acaagccaat 180
tctctcttca gaacatgcc tctcaaaaag attcgatcta ctactgact gtttggatca 240
tcattttgtc aacgaaaatg gccattaaag tgttaca 277

<210> 5825
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C7

<400> 5825

gcgtccgcat gcaatccatc ctatcaccgc ggtacagctt gaatagacac tatggtctag 60
agatgcagaa gaagatataa tccccacttg cagagaactt ggaattggaa tcgtggctta 120
gggtcgacta tgcagagggtt tcttctctag tggaggggga ctagttgact cactatctga 180
gcaggacttc cgcaagcata tgcctatatt tcagccagag aatctcgaca agaacgctca 240
gatattccag cgcgtgagcg ccatcgcagc actgaaagga tgcacgccat cacaactccc 300
gttggcctga gttcactttt ttttttatga cgtctgcccc atacctggca caacaaaaat 360
ccataacttt atccacaacg ttggggcact gtctg 395

<210> 5826
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A8

<400> 5826

gcgtccgcaa aaaaagccct tgatatccaa ggaccagag cgaacaaact ttgattctac 60
agtctggggtc gatctctcta tgattaacaa acacaataaa aaaactatat gtactaatca 120
ggttggaatg tttgtatgta ctaatcaatt taggggggctt gtatatacta atcggtttta 180
taatgtagct gctatgaaaa aatcagaact gaaacaaagg acacaacaat ttttgccact 240
tcatcaactt cataccatgt tttccaacaa ggatacaact ccaacaacaa ctatctcaac 300
gtcctgtgat tgttgttttt ttttactaca aacaccaagt ggagatgtta tacggtttta 360
tcgagatcga cacatttaca gatcgtgctt tc 392

<210> 5827
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A9

<400> 5827
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 ggttgctgat caagcttagc tccttctatt agcatgtaga gcagcactct gggtttctct 120
 atcagtgagt cagtcagcca gccagtcagt gggttggggg taatcggagt tgtagtagac 180
 agtatacatt tctctgggca ggcaatcact gtttgagggtg ttaacagtgc cgttttgccc 240
 tccaattaa gcctctacag tcgggtctaag tgaagcaaaa atgcttacct tgtagtagct 300
 aaatttacat gtgcggggat attttttgta atagaatatt tctgcgcccc gtacgtggct 360
 gttt 364

<210> 5828
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B1

<400> 5828
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 ggggcggcag atctcaaacc acggcaccct ccagtggctc tccgatctca tcgacggcga 120
 ggacgagggc tgctatattgc tcgactccgt cgggtgcgga ggtgaagctg acagagatga 180
 cgatggtaag gcaatcccc aagtttcaac cttgtccttg tttaatccag caaagcgcg 240
 gtgagacttg cagcatcgtc ccggcgccat gactatacgg gcggtgttga tgagatctag 300
 aggggtgctcc agagactggt tttcatgtct ggtgatctga gggagtccat cctgctcttg 360
 caaggctgca agcccatccg ccgcccctcta gccactagca tcttccggga cg 412

<210> 5829
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B2

<400> 5829
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 ccctgatgca gccggccaag atcggcggcc gggcgccctt tgctcgtg ccgtcccgc 120

cggcggggca actcgctgc agggcggttcg gcgggggggc cggcgccgcc aggatcacgt 180
gctccctgca ggacgtcgcc agcaggtgcg tcgacgccgc gaagctcgcc ggcttcgcg 240
tcgccacctc ggcgtcctc gtctcgggcg cgagcgcgga gggcacgccc aagaggctga 300
cctacgacga gatccagatc atttcttata tggagggtgaa gggcacgggc acggcgaacc 360
agtgcccgcac catcgacggc ggcgtggagt cgttcccgtt caaggccggg aag 413

<210> 5830

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B6

<400> 5830

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gcgccggcca gtcctcatg cttccacca cgcgcgaccg ccagcccgcc gtcttctctc 120
agggtcggca ccaaggtctt cgtcgggctc aggggggaga ccaagctcgg ttcgtcggag 180
tcgtcatgcc cgaatgtcag cgctgggttc cacactgcgg tcaaccggag aatctctctc 240
aggttgtcca aaaagaaggc gaccagagcc cgcatctcga tgatgcctat tgggtactcca 300
cgtgtgcctt accgattatt ttttgtttga acctggcaat ggcttgacat atggaacgct 360
ctgtaccgtg agcggattat cttcattggg gacaatatac atgaagaa 408

<210> 5831

<211> 238

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B7

<400> 5831

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ggccaggtgt acgttggtgcg tatgcttgcg cgcgctcgct tcgctttcgc ggcaagtgcg 120
gcggggcggt tgggtggctgc ttttttatga ggggggtggg tatgcttggt gctcccgtca 180
tacgatggga cgtccatctc gtgatgagat gtcagatgtg tgtgaaagag ttctccgt 238

<210> 5832
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B8

<400> 5832

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agtcttaact gttctaaatg tgtgtcatgg atcgctttca ggttctgttt ccatatcaca 120
ggtagtaaat ttaatttctt gtttattttt cggggaggat ttgaagattc tgggagttga 180
gaagattgct tctcaacaag aaataaagaa ggtgtatcac aaattggctc tacgtctcca 240
cccagataag aatcctaggg atgaggaagc caaagagaag ttccagcagc tgcagaaggt 300
tatatccatt cttggttatt tatttaaaag agctttatat gatgatactg gcatactga 360
tgatgcactg gtgggagaag ctgcaaaca tcttcacgag tacttcagaa caatgcacaa 420

<210> 5833
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B9

<400> 5833

cacgcgtcag ccaacacgtc cgcccacgcg tccgcccacg cgtccgaaca cgcgtccgat 60
cgcccgccgc tccaccagaa gcctcggaac cgtcagcaac ggcggaagga tccggtgcat 120
gcaggtgtgg ccggcctacg gcaacaagaa gttcgagacg cggtcgtacc tgccgccgct 180
gtctacggac gacctgctga agcacgtgga ctacctgtg cgcaacggct ggataccctg 240
cctccacttc agcaaggteg gtttcgtcta ccccgagaac tccacctccc cgtgctacta 300
ccacggccgc tactggacca tgtttttttt ttccatgttc ggctgcaacg acaccacca 360
cgtgtacaac gagctgcacg aggccaacaa atcctacccc g 401

<210> 5834
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C1

<400> 5834

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gtttgtcacc aggacagact ccaacacaag ttcagccttt gggaaaagga aagcaactgg 120
gggggggagg tcacagtgc gatctatcac cagcaggagg ggtcctgatt cgacctcatc 180
actacaacag acatctcttt caacgtgaag cagcatcagc tttttgcggg ccaggaaaacg 240
cccacagcta ttctgggctg gctctctcaa atgatgctgg cccaaggctc acctggacac 300
atgagttaca tcacccactc gtcgctgttt tcaatcattt aggtggagca ctccaagctg 360
ctccaatcac agtcacgacg tccacgagaa tccaata 398

<210> 5835

<211> 116

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C12

<400> 5835

acgcgtccac taccgcgtcc gccactctt ccgctcactc ttaatataaa cccgtccctt 60
cctccaattc tctctctgaa ttctagttct ccaacaatta cagctctatc tccatc 116

<210> 5836

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C2

<400> 5836

ccacgcgtac ggagtagtct ctctatcaaa gcacttcag gcattgggtca tacagtttca 60
tctaaactga aaagcaaaga aattgaatat tgtagtcaac ttcgcaatgt ttcaaaggat 120
gcgcgcgaca aggatttcgg aaaaaagact ggtgatgggt tatggaatta ttgtagagga 180
attgatcatt caattgttgg atctgttcag gaaacaaaat ctgtgggtgc cgaaattaac 240
tgaggagtca gatttaatga caacaaagat gccgaacatt ttcttaacaa cctttgcaag 300
gaggtttctc tacgcttgta ttgttggtga gttcaggac gtactattac ccttaagggtg 360
aaaacaagaa gggaagggtgc tggggaacca ataaaatata agggatgtgg tgactgttaa 420

aacacgagt

429

<210> 5837
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C5

<400> 5837

gcgtccgcac acaagtcgc ccacgcgtcc gccacgcgt ccgtttctgt atactttccc 60
cgttctattg ctaccgctgg tcttatgcaa tcgatcggat catatagata tcccttcaag 120
agggggagta ggtcatcgaa aggatctcgg acgagtcggg aaagcacgaa agccagttag 180
aaaatggatt cctatttgaa gagtgcctaa ccgcattggat aagctcacat taacccgtca 240
atcttgatc caattcggga tttttcttgg gaagtttcgg gaagaaattg gaataatatt 300
gattcatata gaggaaaatt ttttttattg atgcaaacgc cgtacctaca ggataaggat 360
agaggaagaa gg 372

<210> 5838
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C6

<400> 5838

gcgtccggac ttaaattggt attttcgtca ggagctttaa agatttgcat ctctggcaaa 60
tcgagttctg cagtagctag ttcattcatca gataacgagt catcttcaat cagtcaaagc 120
ggcttggtgc tcatccaaga tacaagcagc cattggggta ctgaattcaa tcattgtcat 180
ggatcctctt actgaaagtt atacaatgga atcaagcaga agtggactag gccctgtgaa 240
agccattgtc ttttcccaat ggactggcat gctggatttg ctggagcttt cactgaatat 300
caactgtata cagtacattt ttttatatgg aacaatgtct ctcaatttaa gagaaaaaaa 360
tgtgaaggat ttttaactg acccagaggt tacagttatg attatgtcac tgaaagctgg 420
taatcttggg ctcaaaa 437

<210> 5839
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-A6

 <400> 5839

 gcgtccgcaa agtacgagcg acccacgtcc acacgacacg aaacaccacc accaaccagc 60
 agccgcacca cgcacccagc gcaaagcgat ggcgctcgctc accatgatgg cgtccttcgc 120
 cgcggtggcg gtggccgcgc cctcgcgcgc cgggggcggc gccgtggtca ggtccgccaa 180
 ggtcgaccgc tgccagcagc ccgccacgct atcagcaacc gaggccaggc ccgccgccga 240
 cggacgccgc gccgtcatgc tcgcggctgc tgcgggcgcc gtggcagcca tcggcggcgc 300
 cggcgccgcc atggcggggtt tttttttttg gaccccccat gcgatgaaca agtacgcgga 360
 catctgcgtc accatgccca ccgccaacgt ctgccac 397

<210> 5840
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-G11

 <400> 5840

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 cgcacacctgc ctaacattgt tgtgctcaca tttgacccaa atagtgatgt ccgaacgaag 120
 gctgggcagg ctaccgatca gttcttgcaa atagggggca acaccatgaa aagcttaata 180
 caggagacaa cagtgtggct gaaagtactg gtgttaagtt aaagcctgga aatgcagggtt 240
 tacttgggtg ggccatgagt tctgttacac aaaagggtaa accttttgac catgccccaa 300
 tatctactgc aaatgctatt aattctcaag catcaacaac ctcgactgcc actccagaca 360
 ctcaggcttc cacactagcg tatgcacat ccacatccac ctcgcttgat taagctgcat 420
 cagca 425

<210> 5841
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-G2

<400> 5841

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aaggcaatca actacttaac accaccaagg atcttgcttg ctctgggttac tgcattgggtt 120
cgaggggggtc gatgggttga cgacgagga agagcgggtg atgcagctga agctgataga 180
attcgcaact gggctgaaag tcgagcacgc ttctcggttca ccgacgccat ggagatgtac 240
acggaaaaca catgggtttc cgtattctcg ctctcgggtg tctgtgcgtt cataatcctc 300
tctagctccc gtggacttct tccatgcaca tgatttccag agctgtcaaa ctactagtag 360
acggccatgc atatgctcac tttttacccc accaa 395

<210> 5842

<211> 236

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-G9

<400> 5842

cccacgcac cgaactaatt cttataacgg ctttggggccc aacactaatt ctcaccaact 60
gtcactgcc gttcctaagc catcttctgt tccattcct tcacatattg aagtgaaca 120
tctggggctg gcatcagtcg taacctatca cgtcaggggt tagcctaagc ttacagatct 180
ttgcaactga ttaccgaact gtcacgagc ctcatgaaat tacttatgta ccaact 236

<210> 5843

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-H1

<400> 5843

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gccctcgtgg tcctgaccgg cgagcgcggc ctctcgggga gcttcaacaa caacgtgctc 120
ggggagggcg gaaacccgca tcgatgagct caggcagggtg ggccctccagt acaccgtcgt 180
cagcgtgggg aagaagggca acgcctactt ccagcgccgc ccctacatcc cgttggagcg 240

cgatctggag gtgagcagcg tgcccaccgt caaggactcg caggccatct gcgacctcgt 300
ctactcgctc ttcgtctctt ttgatgtgga caaggaggaa gctgccctac tccaagttcg 360
tgttcctggt gcgctcccga cccatcatcc a 391

<210> 5844
<211> 248
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-H10
<400> 5844

cgacacaatca ccggctgcct ctcttccgct cccctgcaaa cctaaccct ccggccaccc 60
cgaaaccgct cgctcgctcg ctgcgtcccc gcgcccatac acatccccgg ataccgtgtc 120
tgactatctc actgaccacc aaatgcgca gttcaacgat gccttcagcc tcttcgataa 180
cgacagccac cgtttcatca ccccccccta gcttggaact gtcatacgtt cattgcgtca 240
caacccat 248

<210> 5845
<211> 420
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-H11
<400> 5845

cccacgcatc cgcagacgcg tgggccagaa acagagatag acctgaacac agtgtatggg 60
cacctcgccg ctatgacaaa tctccgcctg ggggtgtttc acatgccttg tcgtcagatt 120
tttcggaaat gcagtcacat tctggagata atgtcgggga actaacagat ggatcatggag 180
acagaaagac agacacaagg ggatcatggag gtagccgtgg tggtcctgtt gaaaatggac 240
ataggcatgc caaccgtcgt ggtaccccat gtgatccaaa ggaaacaaa atatctgcta 300
gcgtgcctga tggaaatatt tctttgaggg gctctgctag ctatggtgct catgagagac 360
aagtatgggt tcagaagtca agttcaggct cgtgagtttg tccattgatg atactcccat 420

<210> 5846
<211> 328

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-H12

 <400> 5846

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 ccgCGtgcac accgtgctca tcaccacca gcacaactac accgtgggaa cgacaagatc 120
 tccgCCgacc tcaaggagca cgtcatcaag cccgtgatcc ctgacaagta cctcgacgag 180
 aagaccatct tccacctcaa cccgtccggg cgcttctctc tCGgcggacc ccacggTgac 240
 accagcctca cctgCCgcaa aatcatcctc gacacatacg gccgatgcgg agtccacttt 300
 tgtggtccct tctccggcaa ggacccca 328

<210> 5847
 <211> 58
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-H4

 <400> 5847

 acctgtggac atgttttctg ctggaaatca atatactttg gtcactatga agccaagc 58

<210> 5848
 <211> 151
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-H5

 <400> 5848

 caccacgca tccaacagct ccgctcgctc atcagctctc gagatgaaca atcatcgcca 60
 gtgggtgcct gccgaccagc tctcgccgcc gccaccgccg cggtatagat gggacggata 120
 ggggagggga actcgccac atccacaagt a 151

<210> 5849
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-H9

<400> 5849

ccacgagtcc gcacagaata ccccggccag ttgctaaacc ataatcataa cactggagca 60
cagcagcagc agcctgcagc agtccagcag ccgcctgatg agaagcaggg agtcgatgac 120
gaggtgaaaa gggacttgag gagccggggg ctgtgcggcg tcccgggtgtc ctgcacgtcg 180
cacttcggag gggacaacgc cgctgactac tgggccccgg cggcgctcgg cgggatgttc 240
cgctagatag agcatacagc gccgccgtgc cattgaagca tgggtgttcta gacgtacgta 300
cgtagcgggct gggcgagcag ctgtttgggtg cgagtatatg tgttcatgac gcttgctgca 360
ggtagacaga tcatcgagct gtctaagaat catcgcgagc tagctagct 409

<210> 5850

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A10

<400> 5850

cacgcgtccg ctatgttgca aatagataaa aaccttccca tcttgcaaaa gggttgaagc 60
ttggcctcta caatgacgcg gggacacaaa cctgcagcca aaaaatggca gtatcacttg 120
atcatgggga ccaaagtgtga aaattttcat cttgggctgg gaaatgctag tatcacttga 180
tcacaaagag caagatgtgg aaaaaaacat catgggtaaa tctatttatg tttatttcct 240
gacaactgtg acaagtcaac agtgacaaaa gtatctgacg gtctcttggt ctaagttcct 300
ggattgttgc caactcttct tcattctatt taatatctga tcattctatt attgtacgta 360
ctgattaaca atatgatgac tataataatg ctggtaggag tgtgaca 407

<210> 5851

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A2

<400> 5851

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agaagatcaa aggacactta gacattcccg agttctcggt cggtgagatc gatgacctgg 120

gggtggaagt aaggttcagt gacgacaagg gccgcgggtc cgacgacaag gcacggatct 180
gcaaggatct caagtccttt atggccccga ttcaggagaa aatgcgcgtg ttcgaagaag 240
agctcaaggg tagatagcga gcattagcga gaatcggcag tgctaggtgg gcgctgccgt 300
gcccgtgctg gaatgattat tattacatgt tgacgtcttg tgggtgtctcc acgttctaaa 360
gtcgtcttcg gatgactggg actgtctgtg tactgatgcg atgcacttcc ggag 414

<210> 5852

<211> 146

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A3

<400> 5852

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gccttactgg atcatcaaga actcgtgggg ccagaactgg ggggaaaacc ggtactacgg 120
gatgggcacg gggtccaacc ttccca 146

<210> 5853

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A4

<400> 5853

ccacgcgtac ggacaccgcc acaaggagga gcgtccgtgt agctgccgtc gtcgcgaccg 60
aggccgcgca gatcgactac agctcaagcg tctcgggtgt cccgatggag gcctgcgacc 120
tgctggtgg cgacgcgtgc aacgggcca tgtgcgggga ggccaagccc gcctcggcgg 180
cggcggcggc gagcaggagt gtggtcgggg tggacagga ctacctgtcc tacgacgagc 240
caaagacggt gttcccgggc gaggcgtgcg atgaccttg cggcgagttc tgcgaggcgc 300
cgtaccagga cggcgtctct ttttatctgg cgcacgcctg aagaccctga tccatccatt 360
tctgtccacc acgctatgta cgtatgtgta gcagatgggt tacatctacg tgtagagcc 420
cgg 423

<210> 5854
 <211> 225
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-A5

 <400> 5854

 cacgcgtccg caaacgcgtc cgcccacgcg tccggagacc aacaagcaac atagaaagtg 60
 gaatccagta gcaacaatag agcaacaatg gcgaccaaga tattttcccc ccttaagctc 120
 cttgcgcttt ccgcaagttt tgccaaagcc aaaaatttgc ggtcaatgtc aaaaacttcc 180
 aaaagcttcc cttcttcccc cataccttcc atcaatgata gcttc 225

<210> 5855
 <211> 368
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-G10

 <400> 5855

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 ctcttctagc tcgtttcatt atccatggcg gaggagaagc accaccacca ccacctgttc 120
 caggggaaga aggacgagga gcagctcgcc gccggggggt acggcgagtc cgccgagtac 180
 acggaggcca cggtgacgga ggtggtgtcc acgggcgaga acgagtacga cgagtacaag 240
 aaggaggaga aggagcacia gcacaagcag cacctcggcg aggccggcgc catcgccgcc 300
 ggcgcttcg cactctatta taagcacgag gcgaagaatg acccgagca cgcgaccgc 360
 cacaagat 368

<210> 5856
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-033-Q1-E1-D1

 <400> 5856

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tcgacgcggc tgagctgggg tccctggtcgc tgtaccgcgc cgtgatcgcc gggttcatcg 120
ccacgctgct gttcctgtac atcaggggtg gccaccgtga tcgggtacaa gcaccagacg 180
gacgcgtccg cgtcggggcgc cgacgcggcg tccggccgcg tgggggtgct gggcatcgcc 240
tgngccttcg gcggcatgat ctctcctctc gtctactgca ccgccggcat ctcggggggc 300
cacatcattc tttttttcac ctccgcctc ttcctggcgc ccagaggctc cccggtgcgc 360
ccgctgctct acaacctggc gcagttcctc cgcgccatct gcg 403

<210> 5857

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D10

<400> 5857

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ggttaccaag accaagcaga tcaactgagtc cgttgatgtc ctgcgcgcac ttgcccgttt 120
cagggggcct gaaaccactc agactcataa ggggtggggct atcgatgtac tgagctgaga 180
agcagacgat ctccggtggg acttcactaa agatgctctg tgcctctgta tttgtatcag 240
aagccttttg ctgaatggca tacaacagca agctagtatg aagtccaata ctaactgttc 300
atacagcaag tgactgatcc tttgatttgt ggaatcaatt atgatgctgg attgtgacgg 360
taa 363

<210> 5858

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D11

<400> 5858

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catgttgacg aatattttcac ttattatctc ggaatttctg gtgctacgtc ggctgagagt 120
ttttggcggc tgtagtgaaa ttatgcatct tcatgggggc tatccactac ttgtaagggt 180
tacatgcgaa tgtcaccgcc ttgacaatgt ggtataccca gtcgaaactc tatatgcaca 240

cattgccggt attttgggtcc tagtggataa agtcagcaaa gggatatgcta taactagctt 300
tcaatgggaa ag 312

<210> 5859
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D12

<400> 5859

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actgacatcg gataacagtg atgggtgctgg attataaaac gaagatatcg gcgatgatgg 120
tgaggatatg gaaaatgaca aacctttgtc tgaggggaaa acctacgaag atgacgggac 180
cagaactgta gtcaccacca gtgaaattac tcctgaagaa gatgacattg tcccgaaaac 240
tttcggcccc atggcgacga ccctcaccag catgaatcct agctcttttg ccaagaacaa 300
cagcagttta cgtgttatta ttaagccacc gaagagaacg ttcactagca tcgctacagc 360
gaaaacgggt gacaagaacc cgggtgcctg caaatggtaa aacga 405

<210> 5860
<211> 339
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D2

<400> 5860

aaacaaacgg ccggctggcc atgtttctcca tgtacgcctt cttcatccag gcctacgtca 60
ccggcgaagg ccccggtggag aacctcgcca agcacctcag cgaccccttc gggaggggacc 120
tgctcaccgt catctccggc gccgggggga ggacgcctat cctgtaagga cggacgccac 180
gccgccgagc aatgccaaagt catgcgctgc tgcatgccgt ctttgatttt accggggataa 240
aaagctgtat gtgaggggtct gaagaatgtg caatgccac gcgtgtaaata tatcgagagg 300
gggaattttt cttttcattc tgattgtgat aaaacaacc 339

<210> 5861
<211> 312
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D4

<400> 5861

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gagcctcccg tcgtcatttc ggagataaaa ccaccggcac tgccaccctt tgggcgagga 120

ccctaggatg gcacggatgt aggggggggc ccgcgcctac ctcagctgga ggatgcagcc 180

accatcccg c aacgccatgc gaacccttct tcccccgtc ggcgatgcaa aaagctctgt 240

ggagaaaaga ttggtccaca ggtcccactg gggggcaatc cccaagtatc cttcactaac 300

cgctcttttt tt 312

<210> 5862

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D9

<400> 5862

tgagtcctac aaggagggcg tcggccaaaa attacgcagc atcggcaaga tcgtcaaccc 60

catcgacgtc aagttcaccg gcaaggccac cttcaactaa tcacacttgg ggtacgccgc 120

acgccccagc cgggatacag ggtaaagaac ttcttcttct attaattaca gtgtagtgta 180

atgtggctgc tggtaggtg gtgccatgat ttgacatgtg catcatgatc cttgtgtaat 240

tttatcacct agtctcttct tacatttaca tgtccatttg cttgcctctt gcatac 296

<210> 5863

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E10

<400> 5863

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atttaatcca tcaaatcaga tcacagagtc tattcatgtc atctctcaaa ttccttcctt 120

caggggcact cttctactc aacatattag cgggtggggca atttttgtaa tgaattcata 180

tatcatggat cttcaatatg acttcagtat tcatcctctc tacggttcta cttcttagat 240
acaccatttg ctcaagtgcac tatttccact ctacagtaga ttgtacaaca caccctgtac 300
atztatcaag tgctttatct ttttatttat agaagcagat accaacaatgt atcatttttag 360
gcattatcta ttcgggcatt catcagaatg tatctacatt gaccttttca accatttcac 420
catttcctcc 430

<210> 5864
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E11

<400> 5864

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aacctgctat gctcaggcat cccagatccg tcagatccgc cgtaagatgg ttgagattat 120
gatggggcag gcttctacat gtgacctgaa agaggggggtt tcgaagttca ttccagaagt 180
tattggttaag gagattgaga agtctacctc cagcatcttc ccacttcaaa acgtcttcat 240
ccgcaagggtg aagataactca agggccccaa gttecatctt gggaagctca tggaggttca 300
tggtcgactac aaagatgatg ttggtgtgaa gcttgagagg cctgtccagg gagatgatgc 360
tgtgcacgag gttgctgctg ccgagtagtt tgtttgctac ctctatatct aagctgagtc 420
cggaaatgac gttg 434

<210> 5865
<211> 249
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E12

<400> 5865

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agctcgagag ggcaccaata atggcctgcg tgaactccac cgtcgtcggg ctcaaaccgc 120
ccggggcaat gcctcaagcc gccgcctcat catcgggggc gaaactgttg aacttggggc 180
caccgcaggg cggccttgcc gatctgctcg gactgtctgt ccgtcttccc cgtcacgcgt 240

catcaccat

249

<210> 5866

<211> 110

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E6

<400> 5866

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tcaacattca gctcatcaac acctcccttc accataacca tctcctctct 110

<210> 5867

<211> 292

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E8

<400> 5867

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cctccgccgc cattgcagcg agcaagatca atccctctgc tgccattcat gagtcaaggt 120

ggggcattcc ctctgtgaa gaacatcagg gtgggggttg tcatatgcgg cccaagcatt 180

ggcaagggca cccagtgtc caagattgtc acacactttg gattcaccca ccttatcgca 240

tgcgacctcc tgcgccaaca agttcagtca catactgaac acggtgccat ga 292

<210> 5868

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E9

<400> 5868

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aagttaaact gagaatcagc tcttagtaat tataggagaa ttgtagtact tgtcttaagc 120

tttcgagaca agttttggat cacctttttt ggtgatggaa aagttgagtt acagctgttt 180

gaattgtgat gtccaaacct gtccaaatct ggacagagaa gtttgtttgt attagctgac 240

ttt gatccac attgaatcaa cctgaaatgt ttataaagga tttgtagata attttataag 300
 ctttctagaa agtctaagat cacctgtttt ggatgcctaa atctctagtt atggagtttt 360
 gaagtggata attgaattct gtccaaatct ggacagcatt attgttttgt actgtttgac 420
 ctttctaagt gtccaatctc at 442

<210> 5869
 <211> 256
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F10

<400> 5869

ccacgcatcc gaacaatcac ctgtgcctc ttttctctc ccctgactaa cccttcctc 60
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 gtagggggtc cgtcatctc actgactatt atatgtcgg cttctccgac gccttcaggc 180
 ttttcgaggt gggctctcat tgtttcatca catcctacga tcttgtttct gtcattcatt 240
 tactgtgtca tcattc 256

<210> 5870
 <211> 263
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F11

<400> 5870

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 tcagtgcctt tatgaaggag ctggaacctg agtcacctgt taccactgt gacctgcacc 120
 gacggaaatt gtcaaccgcc ccctttatag aaaggggctt ggaatttctg attgggtgca 180
 tggatgatcg ttcatcacac cagaacacgt tccaacatta taaccgcaat ctctcaagac 240
 aacagtcaca gcaacaggca tgg 263

<210> 5871
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F12

<400> 5871

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acgggtccccg cgcttcgctg ggcaagccgg tgaggggggt tggcctgagc atgggcccgcg 180
agcgcgcccc gcgagcatt gtgtgccagg cggcgagcag catctccgcc gaccgcgtcc 240
ccgacatgga gaagcggaag ctgatgaacc tctctctctt cggcgccatc tcgttgcccc 300
ccgtcggcat ggtcgtctcc tacggcgctt tcttcgtccc tgccgggtcc gggaacgccg 360
gcggcgggac ctacgcgaag gacaagctgg gcaacgacat c 401

<210> 5872

<211> 140

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F5

<400> 5872

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tttgcgtatc acacaacaca ccgcaaaata tcttttaaac cctgatgtca actcctcatg 120
gtaggatcca caaaccctt 140

<210> 5873

<211> 119

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F6

<400> 5873

accacgcat ccaaccacac ttccgatcaa taatccccga cagtaaaaaa gccccgccgt 60
gtccgctttc aggtcccaca tgacgactcc atgggtcagc aagtcaaata acaactcac 119

<210> 5874

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-C9

<400> 5874

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cagatcgaaa aggggggagg aattaaattg tggagtcggg tggtgagatc tgatttatag 120
atggaggttg attagcccgg ttggtaacat cagtcggtgg tggtggtggt agtggtgcaa 180
gagcaagacc ctgaccgacg gcctctgcct ccttgcatct ctgttcgggt ttgtgaagcg 240
cgggctctat aaatacgact cagatctgag aggcttctc ctcgtccgcc ccagtctaata 300
ccgattcaaa ccgcccgttc cccgtgtccg tgccaagcaa gccgagccca accccaaga 360
gccagctgct cgggtgctcca cgcgatggct cagaaggaga ctaatggcag caacggcgat 420
tacatctcc 429

<210> 5875

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B10

<400> 5875

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agccaccatc agttcgattt cattcaagaa taaacttaac atgcgttaat catgaaactg 120
gagtgggtga cccaaagaag ttcagcgttc tgggtggggg gcagcgtgat tactcaatgg 180
aatacatcct aaccatctc aagaaagaga tgacatcgcc acagaaccgc aagctagtgc 240
agcctccgga agggacattc ttctaaagat ggcagcaact catgtccatc catggtgact 300
cggaacacgc ttccgcacct gttttctata ttttatatat ttagtctgat ctcccagtta 360
tctgtgaacc accgagatcg actgcaacca gacttggttg atttacaatt tgcccgggtg 420
ttgctaata 430

<210> 5876

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B11

[illegible]

<210>	5877
<211>	432
<212>	DNA
<213>	Zea mays
<223>	Clone ID: LIB189-033-Q1-E1-B12
<400>	5877

<210>	5878
<211>	198
<212>	DNA
<213>	Zea mays
<223>	Clone ID: LIB189-033-Q1-E1-B4
<400>	5878

2565

aactgtccct tccactaaac ctacaacaac tccttcacca tgggcaggtg tcctcatcac 120
atccatcatc actcgtgggg gcgtcccccac cgcccaattc tactacatcc catcttcctc 180
cctcacctgc ttcacccc 198

<210> 5879
<211> 349
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-B5
<400> 5879

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tcaaggcacc cagggcgggc tgagcctgca ctacgggtac ggggacgggg accagcgcct 120
gacgctgaac tacggggggg ggtcgatctg gacgtaccac ttctgaggca actggggcct 180
cctcgacctg acgccggaat tccgcgcttc gtactggtgg gctgacggcg atcgttcgcc 240
gaccagcctc tggcaactga acgccatccc catgttcgcg tggtagaccg gcgatctttt 300
ttttttccac acccgatatc gcgccaccgt gttctcgcgc acccgcttc 349

<210> 5880
<211> 399
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-B9
<400> 5880

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gccactttca aggtggtgga agggcttact gtctgacgg cgctgcactg atctatcatc 120
atcaggcgga ggcgatgcga tgatgatgca gaacttggtg catgcgttgg tggatggtgg 180
tgtaacatag tggctgccaa caagtcatgc tcatgcaaac cgatgaatct atctctgtat 240
catcgatctc gggtgcttgc tagtccagac tccagacatg gctatatata tatagctggt 300
gctaataaat aggagtataa tcgtcatatc gatcggttgc gtgtggaatg ccaatcatgt 360
gtgtaatctg ttggcaaata acaaacctct gttcctccc 399

<210> 5881

<211> 449
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-C10

 <400> 5881

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 tttctgaac aacgctccaa tcattgctgt tgatcgggct ccaaagtta ttgctatcaa 120
 tgtgggcca attgaatatg gacatgtgct tctcaggcct cgtgttctgg accgcctgcc 180
 tcataggatt gatccagaga gcttcttgct tgcactgcac atggcagccg agggaggtag 240
 cccatatttc aggcttggtt acaatagctt gggcgcgttt gccaccatca atcacctcca 300
 ctttcaggcg tactacttgt cagtgccttt ccctgttgag aatgcagcta cccacaagat 360
 cccactctct gatgacacga acaagaattg ggtgaccgtg tccaagctga aaaattaccc 420
 tgtgacaagc cctgtatttg atggaagga 449

<210> 5882
 <211> 123
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-C12

 <400> 5882

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 gattgaaaat gaaacatttt ctgctgcaag gtcgaaggga agttttgggg gcaacaatta 120
 aaa 123

<210> 5883
 <211> 301
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-C2

 <400> 5883

 aataaaagag ttcgaccggc cccgccccgc cccaacaaac cgccccacc gcagcgcccc 60
 caaagcctcc aaacaccacc acctatccgc cagaagcctc ttctccctc gcggtcgcgc 120

catctgcgcc ctgccaataa ccgcggtggt gaacctcacc ctactgaaga agcactcacc 180
 aacaccaag cccctgttc cctcgccctc tccgcccgcg caagattgac atcccggatt 240
 catacatgtg ctaccattcc atttgatttg gcgccgagca ctttcctatt gccgcctcca 300
 t 301

<210> 5884
 <211> 120
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-C3
 <400> 5884

acgcgtccaa tttatttttt tttactggaa caaaattcac cacataaaaa tcccatttac 60
 atttcacata tcaacaccac acaatccttt tccatgaatc ctcatcaatc ctccacctta 120

<210> 5885
 <211> 99
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-C4
 <400> 5885

ccgcccactc gtccgcccac tcgaacacac aatcctccga caattttctc gtaaccttcc 60
 gggctcctct tcctctcctc acgttctccc atcaaacc 99

<210> 5886
 <211> 99
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-C5
 <400> 5886

tcctctcatt cttttactgt tactgaaaac acttctcgaa cttttgtccg cttttaccag 60
 accttccata tcgagttcgt gggagttcgc cactctacc 99

<210> 5887
 <211> 374
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-C6

<400> 5887

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cgggatgaca tgatagtact tgcagaaggg ggggggtgcag atatggttaag agctgtcaag 180

aaagccatcg acatgctacc tggaatagac cccagatta tgcattctcg gatgaaagaa 240

ctttatagtt gggacgatgt tgccaaaaga actgagattg tttatgatcg tgcaatggaa 300

tctccaacaa tttttttact agatcgctt cctcgggtatc ttacttgtgg atcttgggct 360

ggaaaactgt tttg 374

<210> 5888

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B1

<400> 5888

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atgcacactg tgctcggttc ctcatcaaag acccccaaaa ggtgaaaacg gtcgatgaga 120

tgagggagcg gctgaggatg cgtgggtctcc gctgccacag gaggggctgc atgaactcga 180

caaggcttca gggtgtccct ctgctagcat caaggtcaca ggcaactcagg tatctttccg 240

tgcgctgggg cgtatctgtg ggggaacatgt atctgatcac cggggaacat ggcgacaccg 300

atctacagga gatgctatcc ggggtctttat attaccgtga tcgtccgtgg cgtcaccgag 360

aagggttcgg aagcact 377

<210> 5889

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H11

<400> 5889

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gcgcttctcg tccgttacac cgccggcgtc actctgcacc gcgcgctgca tccagcgtca 120
ccgtctccgc gccttcccaa gctcggaaat acctctagag gaactcaacc catccgtcga 180
tctacttagg agaactgcgg aggcggttgg cgatttcagg aaaacgcaa tctatatgt 240
tggtacggat tgcacagcca agcgcaacat cgccaagctg cttgcaatt ccataatata 300
ccgctacctc agcagtgagg aactgcttga ggatgttctt ggtggcaagg acgccctcag 360
agccttcaag gaatctgatg a 381

<210> 5890
<211> 417
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-032-Q1-E1-H2
<400> 5890

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aaactgctgg ttaaacaagg gaggtccttt cactggtgaa ctgagtgtg agatgctcgt 120
caaccttggg gttccctgcg tcattcttgg acactctgaa acgagagctc tgctgggaga 180
atcaaataaa tttgttggag acaagggtgc gtatgcctg tctcaggac taaaggcat 240
tgcatgtgtt ggtgagaccc ttgagcagaa ggaggctggg tctnacatgg atgttgttgc 300
tgcacaaaaca aaagcaattg ctgagaagat caaggactgg agcaacgtac ttgttgctta 360
tgaaccagtt tgggctattg gaactggtac agttgccacc tcagctcagg ctcagga 417

<210> 5891
<211> 441
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-032-Q1-E1-H4
<400> 5891

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gcggggaacc agggttgtcg gaaagaacaa acgttgttgc cggggaacac aggggggtcac 120

agatcatcca cgcaagggtg catgctcaag ctctaaccct ggctgcatta gttgggttctg 300
catgcgtgga gtactatgac cagaagtatg gttcttctgg gccaaagggtg gacaaataca 360
caagccaata cctggcccat tcccataaag attaaaggtc gccatgttgg ttcctgcatg 420
c 421

<210> 5894
<211> 398
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-032-Q1-E1-H7
<400> 5894

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gatctctgcg tgcgtcgatg gcgctgttct cggaggctcc ccccggaac ccgaaagccg 120
gcgagaagat ctttaagacc aagtgcgcgc agtgccacac ggtcgacaag ggcgccggcc 180
acaagcaagg tccaaacttg aacggtcttt ttgggagaca gtcgggtacc actgcaggct 240
actcctactc tgcgggaaac aaaaacaagg ctgtagtctg ggaagaagac actttgtatg 300
agtacctgct taaccctaaa aagtacattc ctggaaccaa gatggtcttc cctgggctga 360
agaagccgca ggagcgtgct gatctcatcg cgtacctg 398

<210> 5895
<211> 290
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-A1
<400> 5895

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gtgatacctg caacaaatcg tgctgatatt cttgatcctg ctctgatgag atctgggcgt 120
ctggaccgga agattgagtt cgggcaggca tcacaggaat caagagctag aatcctgcaa 180
attcactcga ggaaaatgaa tgtgaatcca catgtcaact ttgaagagtt ggcgcgttca 240
accgatgatt tcaatggcgc tcagctaaag gctgtttgcg tagacgctgg 290

<210> 5896

<211> 449
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-A10

 <400> 5896

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 gtcacatgga aagcagcttg tcttcccaga ttcagccatt cccattcgtg gcactctactg 120
 ctgtggcttg tagtcgctca caattttgtt cttcggggga cgtagttgta gccacaagaa 180
 tcgctgctaa gggccggttt gatgaccaga gacacgagg ggatccataa atagcaatgg 240
 gattcctctg acatggatcc tctcgcgac cttggccacc aaattagtcc ttagatcatg 300
 gggattggaa gaggttggtt tttaaattag ttcatttctc ctcaatctcc ccaatcttcc 360
 gtgattccct tttatcacta aatcaaccct aagagcta atctacggta aaagctagag 420
 ctagtcatct gtcactctct tgggatatg 449

<210> 5897
 <211> 162
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-A11

 <400> 5897

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 tacatccatt cgcggaccgg aaggaaagga aaaggtttaa ccatgagcgg cgttgctgtt 120
 tcctcctcgc tgaaaccggg gggcccgctc ttcatcccg gg 162

<210> 5898
 <211> 340
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-A2

 <400> 5898

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 cttgtggtac ctcatatatt caggtatcca agctctgtgc taccgattaa ttgctgaaaa 120

gggaggggttg ggttcatggt aaatattccc aaggagggat aattgggcaa cgggtgtgtgt 180
 atatgttcag attcagaaag tgaggacaat atagcgtttg caacagtggg cgtcgccctg 240
 tgcagggagg gctgtctgat cagagatcaa gagggaaagc acaagacacg ttgtgccggg 300
 aggaaacaca ccatttttgt ttttacttag aagcaataag 340

<210> 5899
 <211> 109
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-A5
 <400> 5899

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 cgtcgcatcc tacgatccaa agctctcact gctcgcaggt ctaacccat 109

<210> 5900
 <211> 175
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-A8
 <400> 5900

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 caacaatggc cgccgcctcc tcgtcctcgg tctcctgct gctcctgcc ggggcgttgg 120
 ctggcatcag cgccaactcc gggaggggtga ccatcaccaa caactgcggg ttcac 175

<210> 5901
 <211> 415
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-F7
 <400> 5901

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 cggtttgccg accaggttcc accgttccag agtagccaag cgaatcccgt gtctggttcg 120
 cgcgatggcg gaggagcagt ccaacccccca gcaccagcaa gcggaggaga gggaggttat 180

ggtggagcag cagcagccga ggagggcccc gaagctgagg tacctggact tcgtccaggt 240
 ggcggtgcc caggccgagg tgtgcctcgc tgggctctac ggctcgcca aggaccacgc 300
 cgccccgctc cgccccagcg ttgacgccgt cgagtctgcc gtcaagggcg tcgttagccc 360
 cgtctacgac cgcttcggcg gcctgccgct cgacgtcctc gccttcgtcg accgc 415

<210> 5902

<211> 358

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-032-Q1-E1-F8

<400> 5902

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 gacagacatc cccttcatag ctactagagg ttatgacagc gtcgtgtgga gtcgaatgta 120
 ctcgcaagac cctgccgaaa gaacacgaca cgctttgatg ctatcttcta ttgctgctga 180
 acaaacgcta gaagctgtag gagccaaagg gatggttgta gggcacacac cacagacgca 240
 tggggtgacc tgtaaagtgt atggcaaagt ctgggtgcgtg gatgtgggca tgtcctgtgg 300
 tgttctttgc tcaaaggcan aggtcctana aatagtcaat gacagaccaa aggttttg 358

<210> 5903

<211> 256

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F9

<400> 5903

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 ttgctagcta ggcgcgaggg cgccatagga tcgaggaggg cgccaccaa atgcattgga 120
 gctaacgaac agcgaggggg gatcatggca gcagctgcca ctacatcttc taaacttgcc 180
 atttttatta tccctgatcc atgtattact cttaatttgt acgtactaca atacgggatc 240
 tggccaagcg cgatat 256

<210> 5904

<211> 391

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-G1
 <400> 5904
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 gatcggttgc cttgctctcc tggcgctcgc tgcgagcgcc gcctccagta caagcggcgg 120
 ctgtggctgc cagacaccac cgtttcatct accgcctccg ttctatatgc cgcctccggt 180
 ctatctgccg ccgcagcagc agccgcagcc atggcaatac cccactcaac caccgcagct 240
 aagcccgtgc cagcagttcg gatcctgcgg cgtcggcagc gtcggcagcc cgttcctggg 300
 ccagtgcgtc gagttcctga ggcaccagtg cagcccggcg gcgacgcctt acggctcgcc 360
 acagtgccag gcgctgcagc agcagtgtg c 391

<210> 5905
 <211> 373
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-G10
 <400> 5905
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 gccatcggcc gccagagcgc ctctcgtcgc ggcggccgct gccatagcca ccgccaccgt 120
 cctcctcccc ttcccaccag cgggtggagaa gatcctgcag gtagtgcagc tgtgaggcgg 180
 tggatctcca gacagtgcag cagttgggtg gcaggtggag cagccccagc aagttgtgtt 240
 agccagcacg catgtgattt tttattgctt tttttttgt ctgcaagaac ctgagttgac 300
 aatggttgcc tgggtgggta ccaagtgcaa ttttctgggt catgatagtt cagaaaaaaa 360
 cgaagaactg aat 373

<210> 5906
 <211> 373
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-G11
 <400> 5906

5907
394
DNA
Zea mays
Clone ID: LIB189-032-Q1-E1-G12
5907
5908
448
DNA
Zea mays
Clone ID: LIB189-032-Q1-E1-G3
5908

aatggccgag ggggtacctcc tcacctgcat ctctacccc aaggcagact gcgtcatcca 60
caccacaag gaggaggacc tgtactagag atcgggttgc tttatgcatc agtggttgct 120
ccaaggtgg tgggtgcgttc gttgctgttc cgtgccacca gcggaagggg gatttcgttg 180
ttgagatggg ctagttcttg tcatcaatth cggtcattcg atgagatcat ggcatatgag 240
ttgtggcaat aatgctggca atatggthtt gcaattcaaa ctgcaaagt gaccagcaat 300
gtcaaaaact gcacactgtg tctctgtgcg aacttgtgaa attggcattg agttcaattg 360
gctagtggc tcg 373

<210> 5907
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-G12

<400> 5907

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ccgttcccca acctctcgtc tgctgcctgc ctgcctgcct gcctgcaaaa aggagtttgt 120
catggcgctc aagcgcatcc tcaaggagct gaaggacctg cagaaagacc cccccacatc 180
atgcagtgca ggtcctgctg gtgaggacat gtttcattgg caagcaacaa ttatgggacc 240
acctgacagt ccctatgctg gcggtgtttt cttagtgaac attcatttcc cgccagatta 300
ccccttcaaa cctccaaagg tttctttcaa gacaaaggtc ttccatccta atatcaacag 360
caatggaagt atatgccttg acattctcaa agag 394

<210> 5908
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-G3

<400> 5908

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caaagtcttg ctaaagtttc caatctaatt gtttacttgg atgatcttta tgatgtatat 120
ggaaccatag aagaacttgt actcttcaca aatgcaattg caaggtggga tgcgatacca 180

aatgagacac ttccagagta catgaaagca ctttattcta ttatatatga cacatcaaata 240
gaagttgctg aacacgcttt gaagaaacat ggtttagta tgcattatct tctacaaaaa 300
tcgtggtatg acatatgcct ggcatttttg gtggaggcga aatggcacca tggaaactat 360
agaccaagca ttcaaaagta tctagagaat ggatgggtat catcttcagc aacattgttg 420
tttgttacat gcctttcgca atgcttga 448

<210> 5909
<211> 409
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-032-Q1-E1-G6
<400> 5909

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tgctctgag gaaatctaca cgggggccag cagagaggtg aaggaggaaa ccggggtcga 120
caccgagttc gttgacgtcg ttgctttcag gcatgccac aacgtggcgt ttcacaagtc 180
cgacctcttc ttcattctgca tgctgaggcc tgtgtcgagt gagatcaaga ttgacgagac 240
agagattcag gcagcgaagt ggatggcgct ggaggagttc gtgaagcagc cttcatcca 300
ggaagaccac atgttccaga agatcatgga catctgcac cagcgctcc gcaagtgcta 360
ctgtgggctg acgccgcacc acgtcgtctc caagtctgac gacagaacg 409

<210> 5910
<211> 441
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-032-Q1-E1-G7
<400> 5910

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aacctattga caatggcccc ccgatattgc ccgaagccta cttggatata tctggaagtt 120
ctattaaccc cagtgagaga acctatccag aggagatgat ccaaactggg atatccacca 180
ttgatgtcat gaattccatt gctcgtggac aaaagattcc actgttttct gctgctgggc 240

tccctcacia tgaaattgct gctcagattt gtcgtcaggc tggctctgtg aagacattgg 300
 agaaaggaaa gcatgctgag ggtggtgaag atgacaactt tgctattgtg tttgctgcta 360
 tgggaatgaa catggaaaca gctcaaatcc tcanacgtga ttttgaagag aatgggtcca 420
 tggagcgggt cacccttttt c 441

<210> 5911

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-G8

<400> 5911

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 acggacacct ggcaccgcgt ggagcggagc agcgggaggt tcctgcgag gttccgactg 120
 cccgagaacg ctaagacgga gcagatcacg gccgccatgg agaacggcgt gtttacagtc 180
 actgtgccga aggaggacgc caagaagcct gaagtgaagt ccattcagat ctccggctag 240
 acctcggctc gcggtcgctc tacctgcgtg gtttgaggaa cggcagttcg cctcggctcg 300
 tctgtgaaat aaaattgggt tacaagaatt atggcgtttg tcaatatggt cctaattgtcc 360
 taggatgggtg gaatgtggtc acaaactttg 390

<210> 5912

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H1

<400> 5912

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 cctattgaca atggcccccc gatattgccc gaagcctact tggatatctc gggaagttct 120
 attaacccca gtgagagacc ctatccatag gagatgatcc aaactgggat atccacgatt 180
 gatgtcatga attccattgc tcgtggacaa aagattccac tgttttctgc agctgggttc 240
 cctcacattg aaattgctgc tcagatttgt cgtcagagcg gtcttgtgat aacattgggt 300
 aacggaaaact atcttgccggg tggatgaatat gacaactttc ctattgtggt tgctcccaag 360

ggagtgatca tggaaca

378

<210> 5913

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E11

<400> 5913

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agctagggag ctccaggagt tccgctctag caacgagtgc acctttcatg taaggattaa 120

ggcgcatag tgtggccagg tctgtccgca tataatttca gttggacaga cctcaggatg 180

gtgccctggc gtagcaccga tgagtgcga aggaggcgcc tgcacctttt cgcttctcgc 240

tagcttcatg actgctgatt gtgtaagggt gcggccatga aaggtgagat tggctctcgcg 300

tcatgaaagg tgagattggt ctgcggcctg atgtgtatat aaaatttttg ccacgaatga 360

ggcgctgca cct 373

<210> 5914

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E12

<400> 5914

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tggtagcagc ccggcaagtc ggagtacttc gcgtcgtcgt ccacgctgtt cgtggtcgag 120

ttcatcctgt tccactacgt ggagatccgg cgggtggcagg acatcaagaa ccccggcagc 180

gtcaaccagg accccatctt caagagctac agcctgccgc cgcacgagtgc cggctacccg 240

ggcagcgtct tcaagccgct caacttcgcg cccacgctcg aggccaagga gaaggagctc 300

gccaacggga ggctggcgat gctggcgctt ctgggcttcc tgattcagca caacgtcacc 360

ggcaaggggc ccttcgacaa cctgctgcag cacctgtctg acca 405

<210> 5915

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E4

<400> 5915

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acgggagcct ccttgacctc cggggcaagg tgttcacgtt cgggctctcc ctgttgaagc 120

tggacatcgg gcaggagtct gaccggaaca ccgacgtgat cgacgccatc acaacgcacc 180

tcggcatcgg gtcgtaccgc gagtggcccc aggacaagag gcaagagtgg ctgctgtcgg 240

agctgcgagg caagcgcccc ctgctgcccc cggaccttcc ccagaccgac gagatcgccg 300

acgtcatcgg cgcgttccac gtcctcgcgg agtccccgcc cgacaagctt ccgccctaca 360

tcattctccat 370

<210> 5916

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E5

<400> 5916

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tgagctcgtg gacatccaaa tcgaggagat tgctggggtc gccaaagaacg tcacttcacg 120

ttgcaaggat aagatgacag agctgggtgg tcaatgaatc tgggtgaggt tcctacttca 180

aacgatgtta aaatgctgtc gtagcttata tggtagagtc tcttttatgg gttggcttct 240

tggtagaaaag ggaatgtttg gttattgcac tgtcatcgta gtgttagaac caacacaagc 300

ataggcactg agtagattgt cacggcagat tattatgtac ttcaattctg gaatatttga 360

tgggaatgct a 371

<210> 5917

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E8

<400> 5917

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gcgctcacca gggagatctc ctccggggat cagacgggtg ccgccccgc ggccgagacc 120
gagaggcctg ccgccgtgag gatcgacagc gagacgcttg cgcagaacag ggacagcgcc 180
atgcagcggg acagggagaa gaagaagaac cgcaggtacg agaagcacat ccggtacgag 240
tcgaggaagc tgcgggcgga cacgaggaag cgggtgaaag ggcggttcgt caagtccacc 300
gaagcactca acgccgccag gtacggcgga tgaagcagcc atatatatat gcatggcctg 360

<210> 5918

<211> 289

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E9

<400> 5918

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cgccgtcagg atctacatcg agatgcttgc gcacagcagg gacagcgcca tgcagctgta 120
catggacaag aagaagaacc gcaggtacga gaagcacatc cggtaacgagt cgaggaagct 180
gctggcgggac atgaagaatc ggggtgaaagg gcggttcgtc aagtccaccg aagcactcat 240
cgccgccatg tacggcggat gacgcagcca tatatatatg catgggctg 289

<210> 5919

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F11

<400> 5919

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gatcgacca tcggagcatg ccggagtagt tcctgaggac tatctgagag aatgccccga 120
agacggcaac aggggaagcca ttacgatatc cagggtcatg ccgaagctga gacacctcga 180
gctgagggtc tcgaagctga ccgccgtcgc cctcggtcc atccctgaag gatgcaagga 240
cctggagggtc ctggacctgt tcggctgcgc gaaccttacg agccggggaa tagaccaggc 300
cgctgctagt ctgaagagtc tgggtgacgct ggtgaagccc aacttctaca tacctcgctc 360

ctcct

365

<210> 5920
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F2

<400> 5920

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gtttccactc cagatccaat tggcaacaag tactatcttg gccctgctcc tctgcaggat 120
atggcaaggc aaattgctac agccaatggc cctactggct ataataggga ttacctgttc 180
tcaatggaga aggcattagc cagcattagc cacgaagatg attcgatcat agagcttgca 240
aacgaggtga ggaaggtgct caacagaaca aaggagacca agatcactgg tgccaatgct 300
tccatgaaat cacatgcccc tcttgtgcac ctgtccgcgc tttcagaagg caccgttgtg 360
gactcgagat agcgacctct actcggaatt tactttcagc tcttgcattg ttgtggttgt 420
ggccatcatg tactgatttt cc 442

<210> 5921
<211> 289
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F4

<400> 5921

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acgtactaac ttggaactgc acctctgcat gatatacaca cggagattgc taaaaccaat 120
ggtcctactt gctataatac ggattaaatg ttctcaatag ataatgcatt atgcagcatt 180
agtcaacaaa atgattcgat tatagacctt tcaacagtgg tgtcgacagt gatcaacaca 240
gcactcgaga cgatgatttc tgggtgccaat tcatcgacga aatcagatt 289

<210> 5922
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C5

<400> 5922

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tcgttacttg tttcctcatt cctatgacca tggtgatcag tgggttgagaa gccaagaagg 120
tgactgcaag gctataataa atttgtacaa ggagcagttg cttcaagcac tgcaggctga 180
taatgagttg aggaggattg cacaggacat ctcaattcaa gggaggtata aaagccgttt 240
cagtactatg aagaagctag taaaagatgg acggaagcca gaagaagtta aagacattct 300
aggtttgagg gtaatcttgg agcctcgggtg tgggtggcaat tcattctgatt gggggccctag 360
ggcttgccac aggacacatg aaattattca agctatgtgg aaggaaatcc cgggtagaac 420
aaaagattat a 431

<210> 5923

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C7

<400> 5923

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tgggggtttg atgatgaagc caatcattta ttgatgcata gaaatctgcc agcagtgaga 120
tgggttggtg gtgttgaatt ggaactgatt gccattgcta caggagggcg gattgttccg 180
agattccaag agttgagtcg tgaaaagctt ggaaaggctg gattagtcag agagaaatca 240
ttcggaacaa caaaggaccg gatgctttac attgagaagt gtgccaattc tagagctgta 300
accattttca tccgtggggg aaacaaaatg atgattgagg agaccaagcg cagtcttcat 360
gatgctcttt gcgtagcaag gaatctgac cggaataact cgattgtgta cgggtggcggc 420
tcaaccgaga tatcttgc 438

<210> 5924

<211> 232

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C8

<400> 5924

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aatgaaggaa catacatcag ctgagttgtg aaaatggtag gcatgcagtg tgaggatctc 120
cgtctctcac tgtccagtga gaagaacgga acatataggt atagctgctg agtggagtgc 180
gtcctcctga tacttggctt ttgcgaataa aaggagtgcc tgctgttgtc at 232

<210> 5925

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D11

<400> 5925

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ctgtgagaat atcatctgga aggcatttag cccacaacc atcaacagtg gtcgtgggtgc 180
tgaattcgaa ggggctgtca ttgcactgtt ccatctgttg attacgagaa ccgataaagt 240
ccgtgctctt cgtgaggett tctaccgcca gaaccttcca aatgtgacca atttgcttgc 300
cactgtcttg gtattcctca tagttatcta tttccaaggc ttccgtgttg tgcttccagt 360
gagatcaaag aatgct 376

<210> 5926

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D12

<400> 5926

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cgtgggctgg aagccagccg agcttcccca ttccgtcgcc gtttctcca gcaagctctc 120
tgcacctccc atggccgctg agctcccaac cagggtgtcc caagcccctg tgctcggcgt 180
ccttcttcca cctccggtg acctccctgt gcatagtgcc ccttcacct tcggccgcgc 240
cccctgcaca ggcacctgt cgccttttcc tctcttccc tagtgcgga gcaaggagcc 300

cctgctcgga ctgcagccac ggcgtccaag tctctgtgca gcgatgccgg tccaaaaact 360
gcagccccgg cacatcgccc ggcttcctcg ctgctaccgc tgcgcgcatg cca 413

<210> 5927
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D2

<400> 5927

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gttcatgtaa tgcaagtcac ctctcatgat aggaacttct ccaggggaat atatctgaag 120
cacaggacga cacgtacaag taatgtaagc cagtctcacg taatggaaat ttctccatgt 180
ggatgtggtc aaagcatagg attttttttc tccaattgtt aactgtacgc gaatggaagc 240
gacagatcat tcgtaggttg tgagggcttc aaagatcatc tgctgctgta catgttttgt 300
tgctgtcttg tgaacataca tgtcttggtg tttctcaact ggaggaatgg tgttaacctg 360
ctgtatcatt t 371

<210> 5928
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D4

<400> 5928

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ctcgccggcc tcgtcctctc cgccccctg tccgaagcag ctacccaagc ggcgaccgac 120
cttcgccggc tcgcccagc agtcgtcgcc cagctccagc gctaagttca ggctcctctg 180
cctcctccat gacaagtccg cggcgccaac gtcgtcggtg cagatgcaga gctcgcactt 240
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ggcgctggcg gtgaccggcg aggaggacat cgaactgcta aggattctgg ccgccgctcg 360
cgggtgttcg cttcttctac ttctcgtcg ctctccggt gatcatgaac tggatgaggc 420
tgaagtggta c 431

<210> 5929
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-032-Q1-E1-D6.

 <400> 5929

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 gggaggacga agccctccgc gtcgtctect gctgttccat cccacatcta ttctgcctcg 120
 gcttgcacct tcgacctcgc tgaaagttct gacctcaaac tgaaaggggc ctgtgaagcg 180
 tttccttgcg gcagtgcaat ggaggtatth ggcaaactctg tgattgctga gccagcaat 240
 gtgattttct tgtccgcaat ccttaacaca gaaggatcaa accctagtca caagtgtgac 300
 aagaggtgcc agaacgagaa catthtttggg aacatgtacc gttgcaaact gactggaacc 360
 actcacatct gtgacaaaaa ctgtaaccag agaatcctct atgacaacca taactcgctc 420
 tg 422

<210> 5930
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-D7

 <400> 5930

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 ggccgactgc cagaagacga tagcttcact gagcagccag ctgaaatcgt tggctgattt 120
 cgacgaattc cccctgaaa ctgagaccag tggcgctgac tcagacgacg cctgggacag 180
 cgatctgaag cttctccaac ccgcaagcta tcccacgcag attggctgtt tggcagtcac 240
 atgattcacg atcctcgttg gcaagtggat agcgaaactg tttttgcttg gcttccgccc 300
 catgattgct gtgatgagat tgccatgatg ttccaccaca tgtcatatag agttaagtta 360
 ataggtgagc aaatgttcat atggaagctg tttatanagt tgtttggtga agcctcaaag 420
 ggactcatat tgaatatta 439

<210> 5931
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D9

<400> 5931

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gataagcccg gtcgtcttag acatctctag ttcacgtgac ttgaatgggt ttaactaaag 120
tgatttttat acaagcggcc taaaaagctg gaaacagtag tctgcatacc ttccgggtggc 180
caaaagctga gtgcccatac ggcacgcaca tgacaaaaat attaatatat tatgttttat 240
ataaatctat agaatacaaa tttattgtta cgttggcctt tcaatataat tagttaggat 300
agttatttaa attttttata taaccattac aaaactaatc aatcaaaaag attcaaaacc 360
ttattatata tttgaattat atcttaattg ttaaataaaa tttttaaaac tataatatat 420
aat 423

<210> 5932
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B10

<400> 5932

accacgcgtc cgcccacggg tccgagaaga cgagtgtcaa gtgaacctga aacttgcggt 60
gtcactggct ggtagcctga gtgtgagtga gtgatcgagc tagctgagct ccgatcctcg 120
ctagctagga taccgccata ccacaagtct tcttcacaag tttaggagtg acagcaacaa 180
gagatcgatg gcctctgcca ccgtgctcaa gtctctcttc cttcccaaga agtccgaatg 240
gggcgccacc aggcaggccg ccgcgccag gccgccacc gtctccatgg tcgtccgcgc 300
ctccgcctac gccgatgagc tcgtgaagac cgcgaaaacg atcgcgtcgc cggggcgggg 360
catcctggcg atggacgagt cgaacgcgac g 391

<210> 5933
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B11

<400> 5933

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gtcggccaca aggatggcat caccgcgac gccacctcgt cggagaacct cgacatgac 120
cttaccgctt cccgcgacaa gaccatcatt atgtggacct tcactcgtga cgattcgtcg 180
ttcggatacc ccaagcgtat cctccacgga cacaaccact tcgtctctga cgttgttgtt 240
tcgtctgacg gtcaattcgc tctctcctcc tcgtgggaca agaccctccg tctttgggac 300
ctcaacacgg gacttaccac ccgtcgcttc gttggacaca ctteggacgt tctctccgtc 360
tccttctctg ctgacaaccg tcaaactcg 388

<210> 5934

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B12

<400> 5934

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aaggcgcagg ccaaggccaa ggccaagccg ccccctcctt cctctcctct cctctcctct 120
cctttcctct ccactctctg gcagccaaag gcgaggccga gatcctgcgc gcggaggatg 180
ccttcaggt ccatgagccg gctgtccgtc gagtccgctt cgggcagcgg cggcggcggc 240
tgccgggagg ccgagccggt gctctgcgcg cctcgccgc gcagggccca gcagcagctg 300
gtccacgtcc acccccgcgg cgcgcacctc atcctcgccc cgcgcacctt ccttctcaac 360
gaggtaccc 369

<210> 5935

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B2

<400> 5935

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gacttcgcgg gcggggccaa ctctgccgtg ggccggcgcca cggcgctcag cccggacttc 120
 ttccgtgcaa ggggggttcca caacatggga aaccgagtgg acctcgacat ggagatgaag 180
 tggttccgcy gcctgctcga cctactctgc cccggcaacc tcgccggttg ctcggatatg 240
 atgaaccaat ctctcttctt agttggagaa atcgggggca atgactacaa cggacctctt 300
 ctttctggag ttcccttcga ggaaattcgc gccatcactc cgagtgttgt tgcgaaaatt 360
 tcct 364

<210> 5936
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B5

<400> 5936

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 aagttgctgc aagcagaaaa ctggagccta aagacaagta agtatagct gaaagtcagg 120
 gagataaacg accggttgat gatggccgag cgagcgttca ccaaccgaga aggactggtc 180
 gggagaccat ggtacaagca tatgatatat gcatcatcgg atcaagacga ctggggggacc 240
 aaagccttcc ctggtatagt ctcggccatg gacaaggcta agaagtccaa cacaaccgag 300
 acgtggcgac tgctgcagca cgagatttac agggttgcc gggctgtgtc caaggcttct 360
 gcagtcctgg atggtaaact aacatgatgt gcacgtgcac tgcagatttt cattccattc 420
 tacatag 427

<210> 5937
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B7

<400> 5937

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 aaccaaattct tggacgggaa cacatagatt tctttggtgg aggaaggagg agggcaacaa 120
 .gaggagggtta caggtagccc aatagatcta ctgctgttga gggagttgat gcaaagctga 180

gttgctgcgc gttggctttc tttagagatg gcttcagctg gtgttgcccc ttctgggtac 240
aagaacagca gcagcaccag cattggtgcc gaaaagttgc aagatcacat gaacgagcta 300
aagattagag atgataagga agttgaagca accataatta atgggaaagg gaccgaaact 360
gggcacataa ttgtcaccac tactggtggc aagaatggtc aaccaaaca gacagtgagc 420
ta 422

<210> 5938
<211> 427
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-032-Q1-E1-B8
<400> 5938

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cctacaaatt caaaagtgc cttgaggctg tgaaaacact gagagcacag cccaatgcta 120
atgaccaata cttgccccca tttgtgatag ttgatgacag cggcaaagct gttgggcctg 180
tattagatgg tgatgcagtt gtcactatca acttccgggc tgatcgcatg gttatgcttg 240
ctaaagcact agagtatgca gattttaaca attttgaccg tgtacgtgct cccaaaattc 300
gatatgctgg gatgcttcag tatgatggg agttgaagct tccaagtcgc taccttgttt 360
cccaccagag atagatagaa catctgggga gtacttgggtg aagaatggca tccgcacctt 420
tgcttgc 427

<210> 5939
<211> 410
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-032-Q1-E1-C1
<400> 5939

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catcagtggc aatcaaaacc agtagcgtag tgcgtgctcc gtagtacttc actggcaaaa 120
tcagcatggc ctacgaggac ttactcact tcaagagatt acgttagagt tcaggcgctg 180
gctggttgcc tggccacgct ttattaatga gttcagttct aaaccctgc tgaagcccag 240

gcagtgtcca tgtctctacg agatagttgt gccagggca agtggacgtg caggtgtgca 300
 gcgcacagcc ttgttggctt cggcacagac ccagcttcga attcgtgctg gtgctgcgca 360
 taaagatgga acttgtttgt gtccagcggg cgagtgctg gtgcctgctg 410

<210> 5940
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-C12
 <400> 5940

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 taacttatta agtttattga aatacattat cggttatgtt cgctagtga cgcacgaggt 120
 tagcttaagt ttaccagctt atatggttaa gttcgacgat tttttttatc cacgttcttt 180
 caccggttcc ttgtgtgggc ggcaaccaa ttgtctgggt ttcaaaattc gcgtcgcggt 240
 ctccgtcatt cctaactccg gcgacccgct ccggtgttgg tccgaactcc agttgcccac 300
 ctcgatcgag gtcccggaac gcagattgaa ataatccctg gccatctctc cgtttccatg 360
 ggttggttca agctccgtag cctcccttgt cc 392

<210> 5941
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-C3
 <400> 5941

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 cctccctccg ggcaaccttc ggcaacctcc cttcaaaaa tcaaccaagg tcctcccggc 120
 cccttccaaa ggcccccttc aaggacaaaa tcggcccccg ggaacaattt gttcgaggac 180
 ctcaaaacga agtgggaccc cggtgaggac aaccaaccg tcctcttgta cggccgcngc 240
 gccgtcgtcg ccctatgggt gacgtccgtg gtcgtgggcy ccatcaacgc cgtgccgctg 300
 ctccccaaga tcctggagct cggtgggctc cgctacaccg ggtgggttcgt gtaccgctac 360

cttctctttt aaggaaagca ngaaagagtt tggcgccgac attgagaact ttgaagaaaa 420
aaattaactg gaac 434

<210> 5942
<211> 359
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-031-Q1-E1-H10
<400> 5942

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gcaggaggga ggacaagaag aagccgatgg cggttgtgag cggcagcggc gggaggctga 120
accctgggc ggagcccttc gtgccttccg gggcgcggtta ccgcggcctg cggaccgtgg 180
aggcgacgcc ggagcaggag gtggaggact tctccccga gtggtggcgc ctggtgtccg 240
cctccccggc ctccgcgac cgctggctgc gcgagtacgg cgcgctcggc ctactcgacg 300
ccgaggacga cctggacgac gacgtcgaca gcttcctccc cgacgacttc ttctcgct 359

<210> 5943
<211> 415
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-031-Q1-E1-H3
<400> 5943

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tgaacaggga tctcctccat attagtgagc aggatgtata atcctcccag tgggcaggac 120
atgtcctact acgatcatgt gcagaagcgc catgaggaga agggctgcct atatgcatgc 180
ctgttcactg cgtgctgctg cttctgctgc ttcgagacct gtgagtgtg cctcgaggcc 240
atctgctgct gctgctagtt ctgcttgag ggcattggcg tccatcatcg tggagatgtg 300
gccatgcggg acaccaccg ccgaataaaa tgctgtactt atatgcacgc acgttagaaa 360
tgcattagtg tctgtttgat gtgatcctgt gtgtgtgcgc gcgcatcttc atttg 415

<210> 5944
<211> 434
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H4

<400> 5944

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atagttgggc ccataccagt agatgatgga aatggaaaag aagtagcaac tgaaattggt 120
acaaacatgg ttacaaacaa aacattctac actgattcca gtggacgtga tttcatcaaa 180
aggataagag attatcgatc ggagtgggaag attgaagtgc accagcctat tgctggaaac 240
tattatcctg ttaatcttgg catctatgtg gaggatggca gcaaagagct gtctgtactg 300
gtagacaggt caattggagg ttccagtata aaggatggac aaatagagct aatgctacac 360
aggaggctac tccatgatga tgggaaaggc gtcgccgagg cgctaaatga aacagtctgt 420
ctcgataagc aatg 434

<210> 5945

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H5

<400> 5945

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aggcggagtt caaggtgccc gcgtcgttcg ggccggtggg cgcggtgctg gtggagaacg 120
agcaccacaa ggaggtcttc atcaaggaga tcaagctcgt caccggcggc gacagcagca 180
ccgccgtcac cttcgactgc aactcctggg tgcactccaa gttcgacaac ccggagaagc 240
gcatcttctt caccctcaag tcatacctgc cgtccgacac gcccaagggg ctggaggacc 300
tgaggaagaa ggacctgcag gcgctgcgcg gcgacgggca cggcgagcgc aaggtgttcg 360
agcgcgtcta cgactacgac gtgtacaacg acctgggcga cccggacaag aacccgg 417

<210> 5946

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H6

<400> 5946

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tgcacacgct agccgatcaa cggctcacgc taccaggcgc tctacgcgga tgtgccccct 120

agccagcttc tctctcccc tcgttctgtg gtgcctctct caccctctct aatattgttc 180

acgtgggccc acttccaatt attagtagat gaaaaattga taggagggtga aaagtaggta 240

tagaaaatga tatttttatgg ttgtagtggg gtatagggga aggatttagg gggaaacgct 300

gtacagagtg gagatatagg ggggaagaga acgctgacgt ggcacgtgag tgggatatag 360

ggaga 365

<210> 5947

<211> 380

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-H7

<400> 5947

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ttctgttggtg gctgggtttcc agtgggcacg gaaggagggt gcactggctg aagagaacat 120

gcgcgggatt tgcttcgagg tctgtgatgt cgttcttcat gctgatgcta tccacagggg 180

tggtggccag gtcattccaa ctgccaggag ggtcatttat gcttctcagc tcacagccaa 240

gccaaggctg ctggaaccag tttacctggt ggagatccag gccccagaaa atgcactggg 300

tggcatatac ggtgttctga accagaagag aggacatgta ttcgangaga tgcaaaggcc 360

tggtaccccg ctctacaaca 380

<210> 5948

<211> 295

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-H8

<400> 5948

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gtgggtcacgg agaagcgaca aggggggacgc gggcgggcgac ggggacgaca gcagcaagga 120
 ngggaagaag cggaggagga agggagggcg acgcccgtg ccgcctctgc tgacgacgac 180
 gacgtcgctg cagctcaaga aggcgctcgc gtcggtcgtc tccggggaga gcgccctact 240
 gcctgcgccg gccaaaggtga gcagtttcgg cgacgccaag aagcaaagca accgc 295

<210> 5949

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A1

<400> 5949

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 ccttttctcg tgccaattac taatgttacg gcattattca ggacaaaact ttactggaag 120
 gtcctgtgtt caatgcattc tgggaaagga atgttgacga gtctgtgcgc caaggagatg 180
 caaggccatt tgtggaggaa gctgtgctgc aagtatctga ctgggggtttc agcctatctg 240
 acatccaaat gcagaagaaa gaggctcgag gcttttttga actcatcaag tctctgttca 300
 atcatgctga aagagagtgg gtgggatttc tgggcccaat acatatatgg caggggatgg 360
 atgaccgagt gatctcgccg tcagtggctg aatttg 396

<210> 5950

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A2

<400> 5950

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 attaaatgtc aacatttgcc ttttcgcgtt ccaattacta atgttacggc attattcagg 120
 acagaacttt actggaacgt cctgtgttca atgcattctg ggaaaggaat gttgcagagt 180
 ctgtgcagcc aaggagatgc aaggccattt gtggacgaag ctgtgctgca agtatctgac 240
 tgggggtttc gcctatctga catccaactg cagaagaaag aggctcaagg cttttttgaa 300
 ctcatcacgt ctctgttcaa tcatgctgaa aaacagtggg tgggatttct gggcccaata 360

catatatcgc aggggataga tgaccgagtg atctcgccct cagtggcaga atttgtgccg 420

c 421

<210> 5951

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A6

<400> 5951

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tgagtaccgc tgcttcgtcg gcggcctcgc ctgggccacg gacgaccact ccctccacaa 120

cgccttcagc acctacggcg aggtcctcga gtccaagatc atcctcgatc gggagacgca 180

gagggtccgc ggcttcggct tcgtcacctt ctccacggag gaggcgatgc ggaacgccat 240

cgagggcatg aacggcaagg agctggacgg ccgcaacatc accgtcaacg aggcccagtc 300

ccgcagcggc cgtggacgca gcggccgtgg gtacgggtggg ggccgtggag gcggcggcta 360

ccgcggtggc a 371

<210> 5952

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A7

<400> 5952

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ggccgagatc aactttctct ggggtccacaa gaagctccga ttcaagcgcc tggcaaccgt 120

gctcatccgg gaagtcaccc gccgcgtcca acaggagaac atctggcaag ctgcatacac 180

cgcggggatc gtccctccaa ccccatcaa cacctgccgc tactggcacc gattcctcaa 240

ccccagaag cttatcgatg ttggattctc tcgccttggg ccgcgcatga ctatgagccg 300

cacggtccgg ctatacaagc tgctgatgc gccgctcacc cctgggtttc gcaggatgga 360

gctgcgggat gtccctgcgg tc 382

<210> 5953

<211> 267
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-F4

 <400> 5953

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 ctgctgcatc tattaaggca atggcacatc aaattccaag ggatcctgca ttcagccggc 120
 tggccgcgca cctaccgaca tgtgcttaaa gcacaagaga acacggcaca cctccattaa 180
 tgcctcaaca atacactgaa tcagtgcctc aggtcatgga attccccac tttaggacca 240
 ccgcagatcc tcaggggaat tctcgca 267

<210> 5954
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-F5

 <400> 5954

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 ggtggcagcg ctgccgtccg tgaggggtggg caggaagagg tcgtcgtcgc agggcatccg 180
 ctgcgactac atcggtcccg ccaccaacct gatcatggtg acgacgacga cgctgatgct 240
 gttcgcgggg cggttcgggc tggcgccgctc ggcgaaccgc aaggcgacgg cggggctgaa 300
 gctggaggcg cgcgactccg gctgcagac gggtgacccc gccgggttca acctcgccga 360
 cacgctggcc tgcggcgccg tcg 383

<210> 5955
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-031-Q1-E1-F6

 <400> 5955

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cggggctgcc tgtcgacacat gctggcggac tccatccacg cggacgtgac catcaacacg 120
 acggacgggg tgtgaaggc gcacaaggcg gtgctggcgg cgtgctcccc cgtgttcaag 180
 agcatgttcg tgcacgacct gagggagaag gagtcgtcga cggtgacat cggcgacatg 240
 tgcgtggagt cgtgctcggc gctgctgggt ttcgtgtacg ggacgatcga gcaggggcag 300
 ttctggaagc accggctgcc gctgctggcg gcggcggaca agtacgggat cngcgacatc 360
 aaggactgct gcnanganag cctgctggag gacataggct cgggcaacgt gctgg 415

<210> 5956

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F7

<400> 5956

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 agctgccata ttttgcccat ctgaaatgta atcatagatt cacatttggg cccatcctaa 120
 ctttctctag gttccggtct ttgttatgcc tactgtgaaa atgcaaaact gtctttcctt 180
 caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaataa aaaaaaaaaa 300
 aatacaaaaa aaaaaatact gctacaaaaa aaaaaagggg ggccccccca aaaatttcca 360
 actttaactg ccggtaacga gaactttaag cccctttaaa aggttcccca aaat 414

<210> 5957

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F8

<400> 5957

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 gatacagggg agccgccggc tcgcgcacac cgatcagttc aggttcctgg acaaggcagc 120
 gtcggtggag ccatcggacg acaagtcgcg tccggcgagc gcgtggcgtc tgtgcacggt 180
 gacgcaggtg gaggagctca agtgctgct cggctgctg ccggtgtggg cgagcgggat 240

cgtgttcgcg gcggcggtaca cgcagatgac caccaccttc gtccctgcagg gcgacacgct 300
ggacccgtac gtggggcggt tccgcgtgcc cgccgccgtg ctctccgtct tcgacacgct 360
cagcgtcatg ccgtgggtgc cgctctacga ccgcttggtg gtcccgctgg cgcggc 416

<210> 5958

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-G10

<400> 5958

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atccaattga atctgttggt gagaaacaga agcgtgggtc tgatcttttc tgtactgctt 180
gtgagatggc tgttgtctgg atacagaatc agctccgtga aaacaagaca aaagaactca 240
ttttgaatta tgctaatacag ctctgtgagc gtctccctag ccccaatggc gagtcaactg 300
ttgattgcca tcagatctca aagatgccaa atcttgcatt caccatagca aacaagactt 360
tcaccttaac a 371

<210> 5959

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-G12

<400> 5959

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caatggagta tctatgcaac ttaccaccac ataggtatga agctgttttc gcgaaagaaa 120
ttccggagac gatcactggc gatgcgtttt tagagaagta tggagaccac aacgatgcgg 180
taacagaagt tgacccaaag cggctcttact gtgtcaaggc tcctactaga catcccatat 240
acgagaactt ccgagtggag gccttcaaag cgttgctaac agctgccaaa acagac 296

<210> 5960

<211> 420

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-G3

 <400> 5960

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 aatcgcaaaag aggcgtcttc caagtttgta gggttaccgg atcggaggag catccccgcc 120
 taggtcacca cagccatggt tcgcggtatc ctaggcaagc ttgcgtcgcg cgccctctcc 180
 gtcgccggga gatggcagca ccagcagctt cgccgcctca acatccacga gtaccagggt 240
 gcggagttga tggggaagta cggatatcaac gtaccagggt gtgcggcgcc ggggtccgta 300
 caggaggtca atgacgcctt gaagaacatg ttccccagtg agaaagagat agttgttaaa 360
 agtcaaatcc ttgctggtgg ccgagggtcg ggaactttca aaagtgggct gcaaggaggt 420

<210> 5961
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-G4

 <400> 5961

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 cataacaaat cgcaaagagg cgtcttccaa gttttagagg ttaccggatc ggaggagcat 120
 cccgccttag gtcaccacag ccatggttcg cggatcgcta ggcaagcttg cgtcgcgcgc 180
 cctctccgtc gccgggagat ggcagcacca gcagcttcgc cgcctcaaca tccacgagta 240
 ccagggtgcg gagttgatgg ggaagtacgg tatcaacgta cccaggggtg ccgcggcggg 300
 gtccgtacag gaggtcaatg acgccttgaa gaacatgttc cccagtgaga aagagatagt 360
 tgtaaaaagt caaatccttg ccgggtggcc cagggtggg aactttcaga agtggggctg 420
 caaggagg 428

<210> 5962
 <211> 367
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-G5

<400> 5962

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gttgtggtcc tcccgggtcta catcgtggca atgctcgtcc tgatagcttc agcatcactc 120

ccggtattgt tccagagcga cgtgcaccct gcagtggttt accttgggtct ctaccttgcc 180

gccattgccca gcggtggcgt gaagccctgc atttctgcct tcggggctga tcaatttgac 240

agcaatgacc cggcggagct ggtgaagaag ggctccttct tcaactgctg gctccagggt 300

gtacaggttt agggaaatgg gagtaagccc cttgtgagc ttacttcaag tggttgttgc 360

agctgtc 367

<210> 5963

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-G6

<400> 5963

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gagaaggcag gcactgtgga tcttttcgct atcttgcttg gcttcccaga caatgtgaga 120

acgaatgaga agggcgagtt ctgggtggca atccactgcc gccgaagtct gtacgcccgg 180

cttatgagcc gccatgtcaa gctgaggaag tttttgctca gcctcccgat ccccgccaag 240

taccactacc tgatgcagat cgggtggcagg ctccacgcgg tcatcatcaa gtacagccca 300

gagggccagg tgcttgacat cttggaggac accaagggcg aggtggtgag agccgtcagc 360

gaagtggagg agaaagacgg gaacctctgg atagggctctg tcctgatgcc gttcatcgct 420

gtctttgacc tcgcg 435

<210> 5964

<211> 415

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-G7

<400> 5964

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 agtgtgtgtg tgtgtgtgtc ggtggagatg gccacagctt acgctcccat ggcgagccag 120
 gtgatgaaga gcagcctcgt cgtgcactcg aggccgaggg gcctgtcagg cgctgctgcg 180
 ctcacgagggc ggcccggccg gttcacctgc aaggccatcc agcccagaaa ggcaacgtac 240
 caggtggtgc agcccatcaa cggcgacccc ttcacggca gcctggagac gccggtcacc 300
 tcgagcccg cgtggcgtg gtacctctcc aacctctcgg cctaccgcac cgccgtgagc 360
 ccgctgctgc ggggcgtcna agtcggcctc gcgcacggct acctcctcgt ggggc 415

<210> 5965

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-G8

<400> 5965

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 cgtgattgtg attcaaattg ctctcatgga caaccttttt tcaactttga tgattcacat 120
 tcttatattc atccattcat tcagaaaaag atatctcatc attgggacat tactttcaat 180
 cagaataagg aagctctgaa tcactatata caagagtcac catatccttc ccttgagaaa 240
 gtaccaactg attcctccgt agaagtagaa ggtacagccg atacaactgc aacaggtcaa 300
 gttttgaaag caaggtcttt aaaaattctt gagcattcac ctgatgatga 350

<210> 5966

<211> 338

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-G9

<400> 5966

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 aggaggacag ccggagtccg gcgttcgctg gggtagtggc gaacacgtgc cgcgcgatcg 180
 agagcgagtt catcgacgtg gtggccgggg accctgagaa ccgaggaaa agagtcttcg 240

cagtcggggcc gatgaatccg ctgcttaacg tgaccgcgcc gacagcggga cagagtgcac 300
ggcacgagtg cttggactgg ctcgacaagc aaccgccg 338

<210> 5967
<211> 257
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F2

<400> 5967

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tgaggttcca aaggaattaa ggatgttccc aaaatggaag gttccttggg ttccggttgt 120
aaaaaacagg tgcaattttg aggctgatgg aaaccgtaat taccatttg gccaaagtcc 180
gggacaccag gttttgaaca attttgaaa actccacctc tttgatttgc caaacggca 240
aaccctttcg gcttccg 257

<210> 5968
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D8

<400> 5968

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aacagcaaca acggcggcgg taataccaac aacaacagca acggcgtgga ggtgaagagc 120
tacttcaaca agtccgccgg gagggcggcg aacaacaaca acaacaacag cagccacgcc 180
ggcggcggca acaagaaggg cggcgccggg gaggacggca ggaagaagca cgccaagagc 240
gagggcgcgg cggcggcggc ggccacggac aagcagcggg tcaagacgct gccggcgtcg 300
gaggcgctgc cgcggggcca ggccatcggc gggtagatct tcgtctgcaa caacgacacc 360
atggacgaga acctcaagga ggaagctgtc cgggctgccg tccaggtaca ggga 414

<210> 5969
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D9

<400> 5969

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ggccaagata ttttccatcc ttatgctcct tgctctttct gcatgtgttg ctaacgcgac 120
catttttctt caatactcac aagctcctat agctgccctt cttcccccat accttccatc 180
aatgaccgct tcagtatgtg aaaaccagc ctttcaacct tacaggctcc aacaagcaat 240
cgcaacaagc aacttacctt taccacccct gttctttcaa caatcgccag ccctatcttt 300
ggtgcagtca ttggtacaaa ccatcagggc acaacagctg cagcaactcg tgctaccagt 360
gatcagcca 369

<210> 5970

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E11

<400> 5970

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agagtctcgc tagctagggc ttccaccaat ggcgggcgccc accacctccc gccgcggccc 120
cggcggcgcg cgcaacatgg acgatgaaaa cctcaccttc gagacctccc cgggggtcga 180
ggtcgtcagc agcttcgacc agatgggcat caaggacgac ctctcccgcg gcatctacgg 240
ctacggcttc gaaaagccct ccgccatcca gcagcgcccc cgtctctgcc atcatcaacg 300
gccgcgacgt catcgcgcaa gccagtcgg gcaccggcaa gacatccatg atctccctca 360

<210> 5971

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E12

<400> 5971

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cgagcagcgc tacattgacg atgatgaata gatgcccgaga tttatttgcc agcgacctgt 120

atttttttttg caacatgttg tcagtacaca tggccaggac tgatgatccc ccatcgtctt 180
 agttctctca gctttccgca tttcaactgt gatcttgtaa taagatgtcg gatctcatgg 240
 attaccaatg taatacacca attatgggtt cttgatctga tggttggctt tctctgataa 300
 aaaaaaacia taaacaagcc taatcagaaa aataaaaaaa aacccaaa 348

<210> 5972
 <211> 353
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-E3
 <400> 5972

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 cgctacactc tggaccgcca ggcctgcgg cttcacggc tacttcacta cggcaacctc 180
 gtcaaccgtg gaaggggtccc cctcaagaac gaggagcagc tcacggacgg gtacctagac 240
 accatcgtcg actggatccc gggcgcgccc aaggacctgc ggctccggga cttcccagac 300
 ttcgtgcgca ccacggatcc gaacgacgtc atgctcaact tcttcatcca cga 353

<210> 5973
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-E5
 <400> 5973

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 ttggaagaag gatgctcttg tggccgcagt tcgttggtat ctggaaagtg gcttgctact 120
 gagcattctc ttactacatg atgtaaattg tgaatctcca tcaaggctgg cttatggctg 180
 aagagtcagt atcatagttt cctttgatgg gagaggacag caaagccagc taatctcgct 240
 atccaagaaa tcggctagta gttttttccc ttttgaacct tgtcacgatg ccttgtcttc 300
 tggataaagt tcacgcaggt ttcaaataag aaatcacatg gactatcaga cttgtatgga 360
 atatggatgc tgtacaaaga tttctaattg acattagtct aactttttt 409

<210> 5974
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E6

<400> 5974

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atcggatcgg caagggccgg ggtggaggca aggagcagcg cgaccagcgc gatacgagat 120
gcggcggaca agaagcgagc ctttcgaacg gacggacgga tgatcgttgc cggtgatacg 180
atgcgcgtca accgctggcc atgcgaatat cggatatatt gtgacacggc ggaccgatgg 240
ttgcggtccg acgcggagtg cggcaagcaa tatgtcggaa tagaatgggt acgtacacaa 300
gctatgctgt tgaaccggcg gacgatgacg ggcgactcgc cttccctgcc gatcgcgtcg 360
cgggcaacgg cccggccccg ttgcggatcc gttgctcttc gcctatttcg gaaccgg 417

<210> 5975
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E9

<400> 5975

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ctgaggttgc tcgtcgagta tgctgcagcg gctgggcatt gaagcttaga ttttgggtgt 180
tttggatgat tgccctccac catttgcccc tttgttgtgt atagaaccta cgttattgtg 240
ctatgctttg taatgtcttc ctcagctgga cccttagaaa gcctactata tttgcctatg 300
taccctcgt gtttaatagt ttgagcagca taataatcta tgggtgttagc actgttattt 360
gcatggggtt 369

<210> 5976
<211> 359
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F10

<400> 5976

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tggcagatgc ctgagggtgg tatagatgca ggggaagaac caagggcggc tgccttcagg 120
gaattgagag aagagactgg tgtcacatcc gcagagatcg tggctgaggc tcccgtctgg 180
ttaacatatg atttccccgcc agatgtcaga accaaactga atgccagggtg gggaaccgat 240
tggaaaggcc aagctcaaaa atggttttta tttaggctta ctggaaatga cgatgagatt 300
aaccttaatg gtgatggatc tgagaagcca gagtttggtg aatggacatg gatgacacc 359

<210> 5977

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F12

<400> 5977

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ttttgtggag gggcgatggc ggcggctgat gtggagtacc gttgcttcgt cggcgggctt 120
gcctgggcca ccagcaacga gtcgctggag aatgccttcg cctcctacgg cgagatcctc 180
gactccaagg tcatcaccga ccgggagacg gggaggtctc gcggcttcgg cttegttacc 240
ttctcctccg agaactccat gtcgacgct atcgagaaca tgaacggcaa ggagctcgac 300
ggccgtaaca tcaccgttaa ccaggcccag tcccgtggcg gtgg 344

<210> 5978

<211> 338

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-C10

<400> 5978

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acgagatggt aaggttgcac tcgaactatc atttgtggaa gcagttcaag gttgcagcaa 120
aacggtcacc ttccaaacgt ctgtaacatg tgaaatctgt ggtggagccg gtgtgcctcc 180

tgggaaccaca cctgaaacat gtctatcttg caggggttca ggatttatat tcatgcaaac 240
 cggggccattc aggatgcaat caacctgcac aaaatgtggt ggttctggga aaactgtgaa 300
 ggaattctgc aaggcatgca gaggaacaaa agttgtgc 338

<210> 5979
 <211> 334
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C11
 <400> 5979

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 cccgtcgtcc tcgatcgtcc cctggactgg atcgcaacgg agatccagct ggacctgcgg 180
 tggtccttc cttttctcga tagcataatg agctcgccag tggagagggtg attcgtcagg 240
 ctggtatcaa gttcctagtc catgggtgcct ggatgagcag tagagatgct actggccgtg 300
 gaaggaggag ggttcttctc gtcttcagct acag 334

<210> 5980
 <211> 356
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C12
 <400> 5980

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 agatattagc cctccttgcg cttcttgccc ttttagtgag cgcaacaaat gcgttcatta 120
 ttccacagtg ctcaattgct cctagtgcc a ttattccaca gttcttccca ccagttactt 180
 caatgggctt cgaacatcca gccgtgcaag cctacaggct acaactagcg cttgcggcga 240
 gcgccttaca acaaccaatt gcccaattgc aacaacaatc cttggcacat ctaaccctac 300
 aaaccattgc aacgcaacaa caacaacaac agtttctgcc atcactgagc caccta 356

<210> 5981
 <211> 161
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C5
 <400> 5981
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 aaaaataata aaagtcaaag gccaatctta ctcttaatct taaattctcc atatgcctgc 120
 attagacccc attgttcttt tactgcgttt ttctattacc c 161

<210> 5982
 <211> 253
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C6
 <400> 5982
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 tcgaagagag gatgtgatca acctgagtta cggataaggg ggaacaacct atccacacgc 120
 acttctcctc cgacccaaca ttatttggtg ttaactagtt tttcttttct ttatctcttt 180
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 atgacgccct act 253

<210> 5983
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C7
 <400> 5983
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 ctggggccacc gtcgctgccg cctgccgcct gccgccctgc gccaggtgcc aagcagccag 120
 gtgttcttgg ggcccttcgc cggcgacgag caccaccagc tgaaagatgg cgaggatacc 180
 gtctctgaag agcctcaatg cgtttccaca tgcggaagag cacttgttga agaagactta 240
 ctctggcgct gttgtgacaa tttttgggct acttataatg attacactgt ttgtgcatga 300
 gctgcagttt tatcttacca cctacacggt gcatcagatg tctgtagatc tgaaacgagg 360

agaaaactctg ccaatccata tcaatatgtc atttccttct ttgccatgtg aa

412

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<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-C8

<400> 5984

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ggccccgtg gcactctcga gaagtcgctc ggtcacttgg ctgtctcctt caccaccccc 120

aagaagaacc tcatcaagat cgagctccac cacggctccc gcaagagcgt cgctaccctc 180

cgcaccgtcc gcaccctcat caacaacttg atcatcgggtg tcacaaaggg ctacctgtac 240

aagatgcgtt acgtctacgc ccatttcccc atcaacgtca acgttgagaa gaacggcgag 300

accgatcagt tcgaggtcga gatcaggaac ttcattggcg ataagcttgt gcgcaggggtg 360

gtcatgaagg ccggtgtcca acttgaaggc tgctatgaac cagaggggatg agctccac 418

<210> 5985

<211> 259

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D10

<400> 5985

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaata aaaaaaaagaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa taaaaaaagg gggggccgct caaaagggtc aatctttttt 180

tccgtttcaa tgcaagttaa aaacttttca aaattgcccc aaaattcaat tccagggggcg 240

ttctttttaa aacttgat 259

<210> 5986

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D11

<400> 5986

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tactgaccc ccaaagctcc ctagtcccta cacaactccg tctggtacgg accatgccat 180
ttgactcctc ccgatctgta agggcgacac gcacctttgc ctgccttca acttggtgta 240
ttcagctggt ttagggcggc tgaaatttgg tttactgcac caacgtggta gggggaatct 300
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<210> 5987

<211> 327

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D12

<400> 5987

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acacagttcc atctggagtt tctggggagg tgaggccaga ttagacgct agcgaggaga 120
agaatgaaaa acaagagtca ttagcacca cagtggacga agcgacgaa caaggaaaaa 180
ctgagggaca gattgaaatt caggtagcat catgatgga tatgataagt gatgaagctt 240
ttacagctga caaccaggag catggaattg gagaatcaaa tgttacttca gtggaacaag 300
tgactgaaga agagaaacca gcactcg 327

<210> 5988

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B8

<400> 5988

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tgctgatccg tacaagataa catttcaaatt tggacatgaa aagttccatg ttccttggct 120
ttatgttata aatcgcaaaa cctctgaagt tccactgatc gatttccatt tgaagtactc 180
tggaatgat atacttgggg tgacagctaa agttgtggac atgcctcacc actacgtgga 240

agttcatcct gacataaaga agaatttctg ggatccacag aattggccaa aatacgttct 300
tgttagatat acatgggagg agcaatcaga gatagatggt actggaggat tttatgtggt 360

<210> 5989
<211> 399
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-031-Q1-E1-A6

<400> 5989

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tacaaacatt tcttaatgct tgtgtgtgag tatatgcaca actctgtact cttgtatcat 120
tagtaaaact gtgttttttt aaatatccat gctgaagggt tctaacataa tcatgttaag 180
tttttatgaa aaaaatttgc ttaaactatg actgttccaa tcagtttttt acctaaagaa 240
ggatttcaca agaatcttgg catttaacag acctgcacac cttgacttta tgaaaaggga 300
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angatgctaa ctgggatcac ctcatgctac gaccgcttt 399

<210> 5990
<211> 409
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-031-Q1-E1-A7

<400> 5990

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attaccaacc tctattttat atcccagctt ctctacagga agtacagtgg aaacttcctt 180
gttaaccttc ttgggaagtg gaaggagtct gaatactctg gccattctat tcctgttggt 240
ggtcttgctt actatgtaac tgccccatca agtttggtg atgtccttgc aaatccattc 300
catgcactgt tttatgtggt cttcatgctg tcagcctgtg ctctgttctc aaagacatgg 360
attgaanttt tcgggttcat cagcaaagga tgttgctaag cagctcaag 409

<210> 5991
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-A8

<400> 5991

gcagaaacga tacggtgcag aacaataccc aatgttcttg caaatcttga gcaggctcag 60
gaccgacaga acagaccatc agagagccct gttacaccat ctaggcagct cttggctcct 120
aatgtacatt tctatgctgg agagtgggat gaactcccaa caattctctc agttgtgcag 180
ccacctgcag caccaacaaa cctcagcttc tctgaggatg attttatgga tggctgcagt 240
agccatgatg gaagcagtgt agttgggtcat gactactgcc ccaggagatc taggaagctt 300
tctggtagcc gtgcatggga gagagctagt gagaccgacc aggcagatag tggctatgat 360
gtgatcttga tttctgatgt cccctaggca gctaactccc tgaagaagct ct 412

<210> 5992
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-A9

<400> 5992

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gctcatcgtc ccacgggctg gcctccacgc eggagcta atctccacgagg acttgccggc 120
cggccgtctt ggataagggc gccgtccaga agaggagcct gctgctggcg acgggctccg 180
acacgagggg agtcgctcag gttagggtcca gcgggatcga gaggaacagg gtgggtctgg 240
gatgtgaagc cgtcaccggg caagtcagtg aggtcaacac ggacaccttc tggcctatcg 300
tcgatgccac cggcgactag gtcgtcgctc tccaaatgtg caccgaatgt gtgcgggcct 360
tgc 363

<210> 5993
<211> 228
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B12

<400> 5993

agatttggag cgctgccctc tgtgccagca gaacataacc acgaggatca ggctctactg 60
atttgatcag gctatgaatt agaaaaatct tggaacaaca gactcccggg caagatgttc 120
agaaccagct ttgtttgtac cgtgcttcac tttgtaattg gtgtcacttt tctcggtagt 180
tatgccaaag gaaagcgcac cagaaaataa tgtacatatt tatcttcc 228

<210> 5994

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B5

<400> 5994

agcggacgcg tgggggaggc caggaggggtg agggggagat ggcggagaac ccgcagctgt 60
ttgggaacgg gatgccgggtg ccgttctacg gcgagatgtt cgtcctcgtc cgggacggcg 120
tcgagttcca cgtcgacaag atcccgtcag ctcttgaggg tcatgtgaaa acaaaaggca 180
caatttacct gtccaatata aggatgggtg ttgttgccag caagcctgtt ggcaacttct 240
ttgcttttga tatgccactg ttgtttgtgc atggtgagaa gttcaatcag cccatatttc 300
actgcaacaa catctctgga ttcgttgaac cagtcgttcc agacaatcag aacaggggccc 360
tgtactcaac tcacaccttc aagatcttgt tcaaggaagg cggctgtggt ac 412

<210> 5995

<211> 389

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-B6

<400> 5995

agccctcctc gcagctggaa aagtatggag aaggcctgtg gatctgcgcc gcgcagctgg 60
ctgtagtatt tgccagaagt tcgtgacctg ctcacagctc actccctcca tctgggtctc 120
ctctgctcct gctccaagtg tctcccgtgt cctctggtca tgcgtggtat ggtatgataa 180
catgaactgt gtgtgtactg gttggtcagg actcgggact tgtttggtac tgtggatatt 240

gtggttgttt gtgctcttgt agcataggtc tggtcgaaca tacctactag taacagtcgt 300
 cgtgtgcggt gtgtgattga attgtaaatg aaaggaacgc ctcgtcatga tacanataaa 360
 aaatagtacc tttcctcgcg gcgcccgcc 389

<210> 5996
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-H8
 <400> 5996

cacgcgtccg cggacgcgtg ggtgctcatg ggcttcgtcg agggctaccg cgtcggcggc 60
 ggcccgtctg gggaagggtt cgacaagggtg taccctcgcg gcgccttcga cccgctgggc 120
 ctgcgccgac acccggaacac cgccgccgag ctcaagggtga aggagctcaa gaacggccgc 180
 cttgccatgt tctccatgtt cggcttcttc gtgcaggcca tcgtcaccgg caagggtccc 240
 atcgagaacc tcttcgacca cgtcgccgac cccgtcgcca acaacgcctg ggcatacgcc 300
 acgaacttcg tccccggcaa ctaactgact gagcaacgcc gtacatgtgt actaccatca 360
 gacccatcca ttcgtccgtc cgtccgtccg tccgtcg 397

<210> 5997
 <211> 262
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-G2
 <400> 5997

aaagtactgc aaggacaacc cggactccga ggagtgccgc atctacgaca actagctagt 60
 cgtatagcta tataggccat cgacatgaag gacgaagggt gtagcacact acgaaagaat 120
 gatactctcg atcggcgcgt catacgtgga atgaacttgt ttgtatcaag ctatctatac 180
 ctcaatgctt ctctacctgc cgccgccgca ccccgatatga tatgtgatac acagctggga 240
 tgggtatactg atatcttggg tt 262

<210> 5998
 <211> 191

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-G3

 <400> 5998

 gcgtccgcac acgagtccgc ggacgcgtgg gcggacgcgt gggccgactc gtgaactgag 60
 gcgtgggtccg tgctgtgggtg cctgctttga ttataaatag ccgtgatgat gcatactctt 120
 gttgagcaat gaattcgacc gaccatattt gaacttccta tgtacgtgtc acgtatctca 180
 agtttgggtgt c 191

<210> 5999
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-G4

 <400> 5999

 cgtccgacca cacgtccgcc cacgcgtccg acaagcacca gtttggctcg tctcggcctc 60
 ggcgcggtgcc cccgaccggt tgctgacccc gctccccggt gatctgatgt cggcgggcggc 120
 acgcgcgccca ccgccgccgc gcgcactcta cgcgcgctcg agaagagtcc ctttcggtgc 180
 cgtgatccta tccgcgccgc gacccggggc tagggttcgc gcggcgcggc ctgcgcaggg 240
 gaatgttcat aaccattgcc tgttgacatc gtctagtctg aattcaaatt ctttgctatg 300
 tcttccatgc aattgtgctc aaatggcttt ggccgacaca agaattgctt accagcctga 360
 agttgacaag catgctggag ttctgggtatg gaagctttga tactatTTTT gcattgggatg 420

<210> 6000
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-G7

 <400> 6000

 cccacgcgtc cgcagctcgc agaagaaggg ccccgcgggg ggcgtgctga tccccaaggg 60
 cgggtgggag ctggacgagt ccatggacga ggcgggcccg cgcgaggccg cggaggaggc 120
 cggcgtgctc ggcgagacgg gccccgcgct gggccgctgg tgctaccgca gccgcagcta 180

cgacgccacg tacgagggct tcgtgctccc gctgcgcgtc accgcggagc tggaccggtg 240
 gcccgagatg gccgcgcgcc gcacggagtg ggtctccgca gccgaggcca tcgcgcgctg 300
 gcccgaaccc tggaatcccc aaggccttca accgggtcccc gaaaacgttc ccgggtcccgg 360
 cggaacaat gcacttcgcc tcggccctct acctctaggc ccggccggc 409

<210> 6001
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H1

<400> 6001

caaacgaaca aaggcacagc gcacctcact tattacgaac cccctctgtg ccaactgccc 60
 ctgccacctc aaatccccgc gaacctatct ttcccttccc ccgatccagg cggttctctt 120
 cccagaagcc agcccagaat ggtgggatcc gacgcgctgc agtccatcgt ttacagccgt 180
 gggtcactcc gcctcctcga tcagaggaag ctgccgctcg agatggagta catcgacgtc 240
 aagagttccg ccgatggctg gaatgcaata agagacatgg ttgtccgtgg tgctccagca 300
 atagccatag cagcggcact agcattagcc gttgaagttt ctgatttaga ttttattggt 360
 acgcctgaag aaacagcttc ttttgtttca aagaaattgg aataccttgt atccagccga 420
 cca 423

<210> 6002
 <211> 348
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-H10

<400> 6002

ggtccacgac gcgtccgaag gacagagaaa gataagaaag gcggtggtca acttgtgtcc 60
 tgaggtgccc gtanaagccc aaggacaaga aacaaggaga agagtagatc tacatctact 120
 ccaccgatga gcgcgtctcg gttcatcaag tgcgtcaccg tgggggacgg tgccgtcgga 180
 aagacctgca tgctcatctc ctacacatcc aacactttcc ccaactgacta tgttccaact 240

gtgttcgaca acttcagtgc caatgttgtg gttgacggga gcactgtcaa cttgggtctg 300
 tgggatacag cangacaaga agatacaata gactgcgtcc gttgagct 348

<210> 6003
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-H12
 <400> 6003

acgttgccga atattgaaga gcttactggt gtaaatacaa cttgggtatc caccttgatg 60
 gctcaacatt tactagctgc tgcagaccgt tatgcattgg agagattgaa gttgctctgt 120
 gaacttaagc tgtgtgaaga tgttgcaata aatacagtgg caaatacttt ggcactggct 180
 gaacagcacc actgttatca gctaaaaact gtttgcttga aatttgtagc tttgcctgaa 240
 aatttgaaag ctgtcaggca aaccgatggg tttgattatt tgcaacaaag ctgcccattc 300
 ctctgaccg agcttctcga gtatgtggcc aacgcaggag agcactccgt gagcccctgc 360
 ttgtattc 368

<210> 6004
 <211> 309
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-H2
 <400> 6004

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 cagtgaaaac atgttcttag aaactgtatc tgaaatcatg gaccgtcacc tcgacaagga 120
 gtgagtttag aaattcagaa taactgatct agttgttcca gctgtatccg gtttgttgtt 180
 tctattgttg acaagcactg atcaacagac taataatttg atttgtttgt acctctcaaa 240
 tgtttctttc gggtgtaatg ctcgagtact ttgcttagca cactttgtga ataatatatt 300
 tgttcagtt 309

<210> 6005
 <211> 427
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H3

<400> 6005

cagatccaag aaacgcataa cggttcgctt ctccggctgt cctcgcatgg cgctcggcag 60

accggttgct tctcgtgtgc gcgtaggctg attccgtgtg cctgctcctt gtctggattt 120

cttaaggcgt ggagccagtt gggccaggga agatttaacc agtcggggccc ggaaggagcc 180

taagggttgg atctgatgct accaggtcgc tgagcatcgc tactgaaggg ggcagcttct 240

gattccggca gatggctcct gaaatgatgg aggaggggca atcagcttcc tataccgtgg 300

atgacgctct cttgtcatca ggttttggga ggttcagat attgattctt tcatatgctg 360

ggattggctt aattgccgaa gcgatggaaa tgatgctgct atcaatttgt ggtccatcag 420

tacagct 427

<210> 6006

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H4

<400> 6006

tccgcccacg cgtccggttt tacagctcaa ggtcttgaag aatagcaagt gttccaggaa 60

cccgtcatca ttgttggtgt gcaccgaggt gtttgagctc ggtccatcat tatatgtcgt 120

agagcttagg aaatcccacg gagactctac gttgtataga cagctgtgcg aaaggctctc 180

cgatgagcta ggtgcctgca agacagacca gatcgcgagg actgaatcat cgagtgcga 240

cctctcgagc gtcgatggcg aagcggtccc tctatctggg ttctgatcat attgctttcc 300

ctgtgttggt ttgggaacag gggatgagga acatgctcgt tcctgatgca attctagatt 360

aggatcatga atatagtgtg caaagccagc ggcggcggcg gtgcaaatta gccaccgggt 420

tgaat 425

<210> 6007

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H5

<400> 6007

agacactagg acctccccctg cccccacgag atttgtatct gtacctgact acgatgagga 60
gtacaatgac tgtgatgatg atgactatga tggaaccgaa tatggcatca accatcctgt 120
taatatgggg aaaggaagaa gggcgagccc atcaagctcg tcttcaccgg caagaagaag 180
ggaatcactc ccgtcgctc cttcagcgcc ctcgacaagg agggcgagga cccacccccg 240
tctgccgcag ccgagccgaa gcccagcaac gatccaccg aggacgacat aagcacttta 300
taaaaaataa ttctcacagg tggaaccttg ttgcattcta cagatttagg caaaatcctt 360
acgggttgcc ttttgattta actaccattc aaattaccaa ctcttgacca gatttattag 420
ttccaattgc ggtc 434

<210> 6008

<211> 213

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H6

<400> 6008

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gtttctgatg tctatgaccg tcccctctat ggcgtctggc ttctgtttt catctggact 120
ggctctaattg tgagcccatt atgctcgttc gtcgtgtcca ttattgagga aactgctca 180
tcacctcctt catctccctc gtttgtgacg ccc 213

<210> 6009

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H7

<400> 6009

accacgcgtc cgcaatccca ttgaatcctc tgccaataaa gaaacatgag tgcaatcggt 60
tgcctatcca catttgctct gaagaagact tcttgaaaga tgcatgcag tttctacttc 120
agagggggcca catccgactt gtacctcagg gaggactggc agaatttcct gacgcagtgt 180

taaattcaaa gcgtcttgat ttatataact tatacaaaga ggtggtatac cgaggtggct 240
 tttatgtagg caatggcata aattggaaag gtcaaacttt ttcaaagatg cacaaccata 300
 cagttacaaa caaaatgacg ggTTTTGGGA aacacctaaa aa 342

<210> 6010
 <211> 437
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-E9

<400> 6010

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 gctgtcgtag ctgccgccgc tgtcgacgga cgacctgctg aagcaggtgg actacctgct 120
 gcgcaacggc tggataccct gcctcgagtt cagcaaggtc ggcttcgtgt accgcgagaa 180
 ctccacctcc ccgtgctact acgacggccg ctactggacc atgtggaagc tgcccatgtt 240
 cggctgcaac gacgccaccc aggtgtacaa ggagctgcag gaggccatca aatcctaccc 300
 ggacgccttc caccgcgtca tcggcttcga caacatcaag cagacgcagt gcgtcagctt 360
 catgccttac aagccccggg cagcgactag accgcgccnc gcggccggcc ccccgccggc 420
 tagctatagc tcctgcg 437

<210> 6011
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F1

<400> 6011

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 tagatgtatt aatatttgga atctcaataa acccctcttg ttttccgtct gctaacatat 120
 tcgtatggaa cccagcacia agctcaacga gaataatgat gcaatgatac atacatgtcc 180
 acagtccata cgTTTTTTTT gaagaaataa cacttttcta gatgagataa ttagcacatg 240
 tgcaattagc caattactgt cttgtgttat gtgagccatt ggatttgatt tttatatcct 300
 acaaattgat tcatgttaca cttgaccttg agattcatgg aaccaattgg ttgagctgca 360

cattcaaatt tgatttggtt taatctaatt aatagcaatt tgttatcagt ggaaggacaa 420
gattt 425

<210> 6012
<211> 294
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F11

<400> 6012

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agaaggacgt agcttttagct acacggattg aagaggccat gaagaaaaat gagagcttgg 120
aagctctcac gactaacaat gtcagaaggc caaccagctc gcagagtgtg aacacgaaaag 180
ggaggccctc aaggttggtt aagacttcaa atgctcttaa agttgtcagt cagaagggta 240
gaaggggagt atcgctatct aacaagtcaa ccccgggctc caaaggatac aact 294

<210> 6013
<211> 244
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F12

<400> 6013

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ttcaggccat gaaaaagtat gggaacttgg tacctctcac gagtagcact gtcaaaacgc 120
cagccagctc ttagagtgtg agcactacag ggaggccctc aaggttggtt atgacttcaa 180
atgctcttaa agttgtcaat cattacggta taatgggagt atcgcgatct agcagggtcat 240
cccg 244

<210> 6014
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F2

<400> 6014

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ggcatgggac tgggcccccc ggccgcgacg aatatactca ctctgtctt catacgtagc 120
catatccggc aggcggcagt acctgtatat ggtttttagct atacgcgacc tcagttcggg 180
cgcaagctac aaccccgacc aggcgagaag aagcatcgct agtgtgacga gcttaaccag 240
caccagcaac gtgatccaaa tccatggaca accagccact gccctactcc acaggccagc 300
ccctgcccc cggatgagcc ccggtggccg gcattcctag cgctgccggc ctcccacccg 360
tgccgc 366

<210> 6015
<211> 395
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-030-Q1-E1-F4
<400> 6015

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ttgaggatga ctttggtcag gaagcagcag agtatctaag tgaatgtttg ctcagtagct 180
caaagcaata ccgggcaatg atcgaagaac atgatacttc tggggggaaa tcaaaaggac 240
aaggaaccgg aaatgttctc attgttactc ttgttgatgc ggagacagaa agtagcataa 300
acgtaccat gcttgaggaa gggcttgccc ggctcgaaag aagcaagaga tgggacacta 360
gggagaggaa gacggctctc cagaacctgg aacag 395

<210> 6016
<211> 376
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-030-Q1-E1-F5
<400> 6016

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gccgttcata ttggcatcgc atcggcgtat gagcgcaatg caccagctct tcaagctcct 300
gcacccccac atgcggtaca ccctggagat taatgcgcta gcactgcaga gcctgatcag 360
cgcggaacggt gtcacgagat cttgcttcac ccctgggtccc gtctccttcg agatcagcgc 420
tgcatactac 430

<210> 6019
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F8

<400> 6019

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cgaagaagtg ctttacttac atggcaacat atagcatcgc tgccacccaa tttgcctggt 120
atctattgtg gaggcttcaa tacacagaag gaatctatga ctgggcggtt tttgcttggc 180
agatccagag aacatggtgt tgttggtgat atgagagatg cttggccaaa tgctcgagtg 240
cgaaaaaatg tttcactaat acacacatat catggattta aaggggagaa acaagggtgcc 300
ctggaatttc ttaaattgat atttagagct ctttgccctc gctgggatcg acagacacag 360
gacttgcata tcgactggat cttgtttaga ggacgccc attggttcctgc actttgtgag 420
gtcattaatg acaatat 437

<210> 6020
<211> 460
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-030-Q1-E1-F9

<400> 6020

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ctcgccctcg tcaacaaaag cccaccgcaa gcgagcgagc gagccaccct ccccgccgcc 180
gccaccgccc ccgtcccgcc cccaccccga ctctcctga ccgcccgcgt ggggtgccc 240
ggctccacct ccggcgacga caccctccc gccgcgcgc ccccccacgc ctgctccggt 300

ttgcgggggt agccgggggt ccggcctcgg cggttttcaa agccccctcc ctcacaacag 360
gatccaaaat cccgtcctag actttcttcta cctcnccttc cagaacttcc tcttttggca 420
tcccggacgg tcgatctcga ccccttcga tttegattca 460

<210> 6021
<211> 371
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-030-Q1-E1-G1
<400> 6021

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acggcagttg cggccaccgt cggacctgag gactcgctga tccggaacgt gattctgcgg 120
tggagatgat aacaatctgg agctgaacgc ggagtccac ttcctgaact acgtgcatcg 180
gtacggcaag tcgtacaatg acgccgacga gactcgata aggctgtccg ttttcaatgc 240
caacctactc cacgcactcc ggcaccacct gcaggaccag tcggcggagc accgcgtcac 300
taagttctca gaactcaagc aggcagattt ccgccggacg tatctcggac tccgcaagta 360
ccggtgcgct c 371

<210> 6022
<211> 460
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-030-Q1-E1-G11
<400> 6022

ggccgggtcga aattccgggt cgagcacgcg tccgagtcaa cacagaatca aagaaaagct 60
ttccccgat cctctcgcgg acaccagcga tgggttcccg ctacgaggtg gaggtcaccg 120
tcggctccgc ccgggacctc aagaacgtca actggcgcaa cggcgacctc aagccctacg 180
ccgtggtgtg gatcgactcc ggcagcaagt gtcgacctc cgtecgacctc gacaacggcg 240
agagcccggc gtgggacgag aagctgctcg tcccgctccc gccacctcc cgctcgacg 300
acgccgtcct ctacgtcgac gtcgtccacg ccaacgccgc ccagggcgtc aagccgctcg 360
tcggctccgc gcgcctcccg ctccgcgacg tctcgcagca cgccggggtc gggggcaagg 420

cctcgcgag cctccgctc aggcgcccet cgggcccgc

460

<210> 6023

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-E8

<400> 6023

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gccatatcaa gtcccagggtc aagtttcttg acctcctgtc ttaactaat caccaaattt 120
tcacccggtg tgtactgtgc agttgaggcc gccacaaat ggtggactag ctgtccagac 180
aatgggtagt gcctctcaag ttgcttttgg ttaccagca gtccagctac caacacttga 240
aacgggctct tcatgggcat ttgggtgctc acctcaggct ctgtcttctt ttactgcaa 300
agacaaagct gatcaaacag gaaccaagca agttgacgat ggcaagaagc cccaggaggc 360
agggtgcttc tcgtctgtc atgctgaaga tgagaaaaag gctgatagag gactctctct 420
tatgggttct gccataa 437

<210> 6024

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-D4

<400> 6024

gggtccacca cgcgtccgag cagatcttca accgtaacct gacaacaatc aaaaactatg 60
gcatctggct gccctacaaa accaaaaccg gctacaacaa catttacaag gattaccgca 120
acacaaccct gaacggcgct gtagagcaga tgtacaatga gatggcttct cgccaccgcy 180
tgagggtccc ctgcatccag atcatcaaga ccgccacagt acacttcaag ctgtgcaaga 240
gggacaacac caagcagttt cacaacagt agatcaagtt cccactcgtg taccgcaagg 300
tcaggccgcc gaccaggaag ctgaagacca cgttcaaggc ttcgaggccc aacctgttca 360
tgtgatttag ctgtgggtcag tgtatgtgat cgtaagaatc tgtgttttaa gttttgacgc 420
taagacttgg gtgggttgaa gattcaac 448

<210> 6025
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-D5

<400> 6025

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 tggcggccgg gatggtggac gcgatggtag tctcgacaat tctggcaggt agtcttctaa 120
 aggggtgcct caactcggga gacgggtcac ctcttcgcc gtcctctgct ccataaagag 180
 gatcaatacc gagatgccct acgggattgg aggtgggatt accgttgacg tgaacgtcaa 240
 cgggaaaaac ggcaagggaag agggcatggt aaaattcgct tacaagtacg gcgcgaactt 300
 cgacgggtac atcccaatct ataacgaaga tctactgtct gataacgggg atgtcaacgt 360
 cgatgtaaac agtgggctta aga 383

<210> 6026
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-D7

<400> 6026

accacgcgct cgcgggacgcg tggggcggac cgtggggcgga cgcgtggggc tgccgacgac 60
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 acagtggcgg aggtggacct tgagatggct ctgcctcctg catatgcacc tgcccatgcy 180
 tagagagagc actccccttc actatcatcc agccgacgag ttcactctag ctccagctat 240
 acatccagtc tgtgtgtgta tattatatac agatccactg tttgttttct aagacctcga 300
 tgtatactga aagaaaagta aagacagcag aacagacgca taaaggaata gattagatta 360
 tatagccgat ttcgttccac tatttgtttt ttgagaatgc ttagtatttt aagatattgt 420
 gggttttttc agt 433

<210> 6027
 <211> 432

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-D8

 <400> 6027

 aggacgcgtg ggcttgcgat tcgctcgtc gatcctagct tcccttccaa gaagcgcagc 60
 gcccatggcc atgtccacgc aagcctccgc cgccacgcgc cacctgctgg ccgccgcctg 120
 ggcgccggcg gcgaagccgc ggcagctgag ctgcgcagctc gcgctgccgt cgtcgtcctc 180
 ccgcggggccg gccccgctcc gcgcgtccac cgaggaggcg gtggaggcg ccaaggggtt 240
 cgtggccccg cagctggacc ccagcacgcc gtccccgatc ttcggcgga gcacgggcgg 300
 gctgctccgc aaggcgcagg tggaggagtt ctacgtcatc acgtggacgt cccccaagga 360
 gcaggtgttc gagatgcccc cggcgggcg cgccatcatg cgggaggggg cccacctctt 420
 gaagctggcg cg 432

<210> 6028
 <211> 367
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-E12

 <400> 6028

 agggccgcgc ccgccagaac cggcggggttc aacctcttgc tccccccggc gcaaaggctg 60
 cctccaattc ttcctaccat cattatccga aaaggtgtaa ggatacaagc ggcggcgga 120
 gcaggcgggtg gcggcgcgct gctggggcgt cccatggagg acgtgtacaa ggtgcgcgtg 180
 gagcgaggcg aggtggctcg ggcacggatt gaggcgctgc gggcatgga gacgtggctg 240
 tcgtggcgca ccgggtggcc ggtgccgat gccgtgggac tggcaggctg accagctcgt 300
 gtacatcgtg tccgngggag gtgaaggtea tccccgcgg cgctgtccac ggcgacgact 360
 acatgca 367

<210> 6029
 <211> 93
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-E2

<400> 6029

cgcggtccgac cacacgtccg aaaaaataaa aaaaacaaaa gtagctcaac agagaagcta 60

aactaaaaca aaaacatggc gtcagtcaca gaa 93

<210> 6030

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-E4

<400> 6030

gggtccagca cgcggtccgag aggacccggc ggcgggggcg agcggcagca agtggcggct 60

ggcgacgctg acggacgtgg aggaggtgaa gacggtggcg cggatgctgc cgatctgggc 120

gaccacgata atgttctgga cgggtgtacgc gcagatgacc accttctcgg tgtcgcaggc 180

caccaccatg gaccgccgcg tcggggggctc gttccagatc cccgcgggct ccctcaccgt 240

cttcttcgta ggtccatcc tgetcaccgt gcccgcttac gaccgcctcg tgggtgcccg 300

cgcgcgccgc gtcagcggca acccgcacgg cctcaccccg ctgcagcgga tcgccgtcgg 360

cctcgcgctc tccgtcgtag ccatggcggg cgccgcgctc acggaggtcc gccgcctccg 420

cgtcgcgcgc gagtcctccg agtcgcctc cggaggcg 458

<210> 6031

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-E5

<400> 6031

aagccgccgc ggcgggcggg atgagggcgt accacgagcg ggtggtggac cactacaaca 60

acccgcggaa cgtcgggttc ttcgacaagg aggaccccaa cgtcggtact gggctggtag 120

gcgcgccggc ctgcggcgac gtcataagt tgcagatccg cgtcgacgag gactccggta 180

aaatcgtaga cgctgcttc aagaccttg gctgcggctc cgccatagcg tcctcgtagc 240

tcgctactga atgggtgaag ggaaaaccaa tggatgaagt cttgacaatc aagaatactg 300

agattgcaaa gcacttgtec cttccaccag taaagctcca ttgcagcatg cttgcggagg 360
 atgccattaa agctgctgtg aaagactacg aagccaagaa cgcgaagatg gggcaaaaaga 420
 gtgaagacag 430

<210> 6032
 <211> 430
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-E6

<400> 6032

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 cgaggatgtc ttgcaactgc ggatcaagct gcggctgcgg ctcaagctgc aagtgcggca 120
 agaagtaccc tgacctggag gagacgagca ccgccgcgca ggccaccgtc gtcctcggcg 180
 tggccccgga gaagaaggcc ggcgccgagt tcgtcgaggc cgcggcggag tccggcgagg 240
 ccgcccacgg ctgcagctgc ggtggcaact gcaagtgcga cccctgcaac tgctgatcac 300
 atcgatcgac gaccatggat atgattatta tctatctagc ttgtggtggt ggttgaacaa 360
 taataagcga ggccgagctg gctgccatac ataggtattg tgtggtgtgt gtgagagaga 420
 gaganacaga 430

<210> 6033
 <211> 429
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-E7

<400> 6033

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 agatgtatta atatttgga tctcaataaa cccctcttgt tttccgtctg ctaacatatt 120
 cgtatggaac ccagcacaaa gctcaacgag aataatgatg caatgatata tacatgtcca 180
 cagtccatac gttttttttg aagaaataac acttttctag atgagataat tagcacatgt 240
 gcaattagcc aattactgtc ttgtgttatg tgagccattg gatttgattt ttatatacta 300

gaaattgatt catgttacac ttgacctgag attcatggaa ccaattgggt gagctgcaca 360
 ttcaaatttg atttgtttta atctaatagaa taacaatttg ttancagtgg aaggacaaga 420
 ttacgatg 429

<210> 6034
 <211> 336
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-D2

<400> 6034

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaggaa aaaaaaaaaa aggtataaaa 120
 aatttaattg aggtaaaagg aaaataaaaa atttttttaa aaaataaaag ggggttttat 180
 ttaaaggttt ttatttttaa tttgtgttga ttgggaattt aaatgttttt aaaaaattta 240
 attaattttt atttaaaggg cttttttttt aaaaggtttt tagggaaaaa gccttggttt 300
 ttttaatttt acattttttt aaaaaaattt attttt 336

<210> 6035
 <211> 338
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B4

<400> 6035

agcgggaggg ccccgccgc tacgactggg aggcctacgc cgagctcgtg cgcatggtgg 60
 agcgagccgg cctccgactc caggccgtca tgtccttcca ccagtgcggt ggcaacgtcg 120
 gcgacacctg caacatcccc ttgccgccat ggggtgctgga ggagatgagc agcaacccgg 180
 acatcgtgta cacggacagg tccggccgcc ggaacccta gtacatctcc ctcggctgcg 240
 acacgtgcc ggtgcttaag ggccggaccc ccatccaggt ctacaccgac tacatgcgca 300
 gcttccgcga gagattccgt gactacctcg gcaatgtc 338

<210> 6036
 <211> 60
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-B5
 <400> 6036

aaaaaacata aaaaaaaaaa aaaaaaaaaa aaaaaagaaa gaaaaaggaa gaagatcaaa 60

<210> 6037
 <211> 370
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B7

<400> 6037

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 gaacgcctgg aagaaggccg gcgcctgctc eggcctcagc gagaaagact acttcgagac 120
 tgccctctcc ttccgtagcc ggatcaaccc actcgttcgc ctcaaagcca aaggatcga 180
 gccggacttc gggctctacg gcctcaaggc gatcaccaag gtcttcaaga gcggcatcaa 240
 cgcgacgccg gtgatccagt gcagcaaggc cccttcgac aagtacatgc tgttccagct 300
 ctacttctgc gcggcgggga acggcacgtt catcgactgc cccgcgccgc agcagtacac 360
 ctgctccaag 370

<210> 6038
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B8

<400> 6038

tgccaacgctc gctgaccttc tgtgatcatt ttgaagaaaa acagaactaa aagaaagggtg 60
 gtgggggtga tctggtaagg cttggttttg ccgaaatatt gtggggggag gagtggagga 120
 gtgataaggt cgggtggggtt tctatgttaa agtcgtggtc tcgggcaata tgcgattttt 180
 ctttatgcc a tgttttggga aattttgtag ctgcctaggc ctcgtactgt tgtggtgggt 240
 cattagtacg aagacgaagg ctctgctggc gatgggagtc ctttttcttt ttgttagtat 300
 tttgtttaaa actatgtatg accgaattat ttgtcatcct tgactcaatt ctgctgcaac 360

cagttgtatc gtgccatgtg tctctgcagc accggtcgtt gctgttctga gtaaaatctg 420
 tttactctg 429

<210> 6039
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-C2

<400> 6039

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 cagcaacaac ggcggcggtg ataccaacaa caacagcaac ggcgtggagg tgaagagcta 120
 cttcaacaag tccgcgggga ggcggcgga caacaacaac aacaacagca gccacgccgg 180
 cggcggcaac aagaagggcg ggcggggga gtacggcagg aagaagcacg ccaagagcga 240
 ggcgcggcg ggcggcgcg ccacggacaa gcagcggttc aagacgctgc cggcgtcggg 300
 ggcgctgccg cggggccagg ccatcgggcg gtacatcttc gtctgcaaca acgacaccat 360
 ggacgagaac etc 373

<210> 6040
 <211> 424
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-C5

<400> 6040

catttacgta tatgcccttg tcccggttcc tttccccatc cccaactcca ttatttgctt 60
 gatccttgag aagagagagg aagacgagag ctagaagcga aggagaaaag cagttcttca 120
 gctaggcagg agggcacagg aaggaggaaa tggcgtcaaa gaggattcag aaggacctca 180
 aggttctgca gaaggacctt cccacctcgt gcattgcagg tcctgttggt gaagacatgt 240
 tccactggca ggcaacaata atgggtccat ctgatacccc atattctggt ggagttttcc 300
 aagttacaat ccatttcctt cctgattacc ctttcanacc accaaaggtg gcatttcgca 360
 ctaaggtggt ccatccanac atcaacagca acgggagcat ttgcctcgac atcttgaagg 420
 acca 424

<210> 6041
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-C6

<400> 6041

gtccatcctc catcgccatc caatggccgc caccgccctg agcatgagca tcctccgcgc 60
gccgccgccc tgctttctcgt cccactcag gctcagggtc gcggttgcca agccgctggc 120
ggcccccatg cggcgccagc tgctgcgcgc gcaggccacc tacaacgtga agctgatcac 180
gccggagggg gaggtggagc tgcaggtgcc cgacgacgtc tacatcctgg acttcgccga 240
ggaggaaggc atcgacctgc ctttctcctg ccgtgcgggg tcctgctcct cctgcgccgg 300
caaggctcgtc tctggtctcg tcgaccagtc cgaccagagc ttctcaacy acaaccaggt 360
cgccgacggt tgggtgctca cctgcgctgc gtaccccacc tccgacgtcg tcatcg 416

<210> 6042
<211> 431
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-030-Q1-E1-C7

<400> 6042

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caagatattt tccctcctta tgctccttgc tctttctgca tgtgttgcta acgcgacaat 120
tttccctcaa tgctcacaag ctctatagc ttcccttctt ccccataacc ttccatcaat 180
gatagcttca gtatgtgaaa acccagctct tcaaccctat aggctccaac aagcaatcgc 240
agcaagcaac atacctttat cacccttggt tcaacaatcg ccagccctat ctttggtgca 300
gtcattggta caaaccatca gggcacagca gctgcagcaa ctcgtgctac ctgtgatcaa 360
ccaagtagct ctggcanacc tttctcccta ctctcagcan caacaatttc ttccattcaa 420
ccaactgtct a 431

<210> 6043

<211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-C8

 <400> 6043

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 gtcgtccgcg ggcgacaaga ggaagaagac ggcgtgcgtg accggaggga acgggtacat 120
 cggctccgcg ctcatcaaga tgctgctgga ggacggatac gccgtcaaga cgacgggtcag 180
 gaaccccgac gacatggaca agaactccca cctcaagggc ctgcagcagc tcggggccgct 240
 gacggttctc cgcgccgaca tggacgagga gggcagcttc gacgacgccg tcgccggctg 300
 cgactacgcc ttctctgctg ccgccccggt gaacctctcg gcacaggatc cagagaatga 360
 gcagatcgag ccgtccgtcc gaggcacgct gaacgcgatg cggtcgtgcg c 411

<210> 6044
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-C9

 <400> 6044

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 acggttgccc gtgctggtca gaatgggtac caccaccgca ctgagatgaa caagaagggtg 120
 tacaagatcg gcaaggctgg acaagagacc cacgatgcct ccacagagtt tgacaggact 180
 gagaaggaca tcaactcccat ggggtggcttc cccattatg gtatcgtgaa gggtgactac 240
 ctgatgatca agggctgctg tgtgggacca aagaagaggg tggtgaccct ccgccagtcc 300
 ctctgaagc agacttcccc gctggcgctg gaggagatca agtcaagtt catcgacaca 360
 tcgtccaaat ttgggca 377

<210> 6045
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-D11

<400> 6045

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atgcttatgt gatttggaga tgcagcaaga ccaggacaga agtggcacat ctactacgcc 120

actgagtacc cagagcaacc aatgggtcaac cttgagatgt gcatgactgg tctggacacg 180

aagaaagctt cagtcttctt caagactaat gctgatggca acacaacatg tgccaaggaa 240

atgacgaagc tctctggtag ctctgaaatt atccctgaga tggagatctg tgattttgac 300

ttcgaaccct gcggctactc catgaatgca atccatggct ctgcgttctc cagcatccat 360

gtgacgcctg aggatggggt cagctacgcc agtt 394

<210> 6046

<211> 404

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-030-Q1-E1-B3

<400> 6046

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gggaaagtga tcggcaagtg gatgagggtc atgaaaggcc agattcagcg tgccaggctc 120

ttcgttgatg aggcggacaa tggcgtcacc catctcgact ctgctagcag atggccggtg 180

ctcgcgtcac tgtggctgta caagcagatc cttgatgcca ttgatgcaaa cgactacaac 240

aacttcacca agcgtgcgta cgtcggcaat gccagaagc tgctgtcgtt accgcttgca 300

tatgcaatgg ctaccgttgc accatgaacc atccgtagat cacatctttt tttttcgttt 360

cgtttcaaac ccaccttggt ttgccccaaag cttccttatt tttt 404

<210> 6047

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H9

<400> 6047

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cagtgtttat acctcggaac ttagctctgt agataagaaa tgcacaacat tgcccatgta 120

ttccgccttt tttgagagga aagctcgtgg aatctatttg attttttttc tctgtactac 180
 caattacaaa gggttgtagg tggagctgtg gaggccagag cgggcaaccg tgtggcttaa 240
 cattctacca cgcctagcac tctagcaggt ttcatgaagt ctactacggt ggtgaatcag 300
 atcgcacaaac tgttgtgttg taggagcgag tatgtgctcg ttttgcgca caaagatgt 359

<210> 6048
 <211> 115
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A1

<400> 6048

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 catgacacgc acccgccgta actcccacag cctggggccac aagtcgccg cc gtgac 115

<210> 6049
 <211> 386
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A10

<400> 6049

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 aaagttccct gatgaagtta ccaagcacga agcagaccct taccaccatc ggtatccgcg 180
 cgcacagtcg tatcacgacc ttgccgtacg catggaaccc attcattcta aaacttgacc 240
 gtgaatagaa tgaccttctc atcatcgctc atgagtctgt ccttcgtgta ctttacgggt 300
 aactgatggc atgtaatgcg gccgacatat ccaagctcga gtttcctcgc gatgagatca 360
 ttgagattat accctcatcc tacaac 386

<210> 6050
 <211> 259
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A12

<400> 6050

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ccttgggtgt ccttcccggg ccgggtcccca agccttagcc caatccttgg gaacaacggg 120
ttattgcccg ccgcggcaac aagcaacaac aagcccttaa ccgggaacaa cccccaccaa 180
aagccacaat tgctccggcc ataaaatggc cagtaccatc cggccaccaa tttcctttgc 240
cacaaaaaga taaaacccg 259

<210> 6051

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A2

<400> 6051

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tatcaaaaatt ggccttaaaa ttgttaccce cttgatattt ttggatcttc tgaagtaccc 120
aaaacttaac cttgataatt ttgtgcgtag atcgacttg ttggaactgt acacggaaaa 180
tgttgctcac gtaaatagtg atgcttttaa atgattattg gaagtcttga cttcgggctc 240
cgtaatcagg atagcgatgt tgttgagagg tgcttggcac gaataaatgc acctgcttca 300
tacaatttca aagacggatt atgacggata ggaagactga actctcagct catggaatct 360

<210> 6052

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A3

<400> 6052

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cctgcagggc ctgcaatatg aagtactgca ctggtgcata tgtaggctgg aggcattggtt 120
cgctactgac atggacaata tatctctgaa aacttgggat caggaacatg tgcttaccgg 180
cggacatggt cttatggtga atggctacga ccctgtcatc agagctctcg ctcaaggctt 240
agatattcac ctcaaccaca gggtcacaaa gatcatacaa cgctataaca aggttattgt 300

ctgtgtggaa gatggggcga gttttgtcgc agacgctgct atagtaaccg tccctctcgg 360
 ggtactcaat gcaaacaatca tcaagtt 387

<210> 6053
 <211> 203
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A6

<400> 6053

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 acgtgcctag tatggagctg gagcattcct cgctgtctgg cttcccttgg ttgtagtgcg 180
 atatcacgag gccgtcgagt tgc 203

<210> 6054
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A7

<400> 6054

acagctagtt ctctagtga cagcaacctc gcttgctcat caaggatata atcctgttca 60
 gacttcacat atagccactc ctggcgctcc ataatgcta tgaaactcca tcagatgcgt 120
 gctgtgagct caatacgtat aagttgtgct gccactaac ctgcaaagac tcctgctgaa 180
 gaagaatgga aagttaagcg gcaactgcta tcagaaaagc gggtagaag tgtagatgtg 240
 aaggaagcac tgcgccttca aaaggaaaac aactttgtca ttcttgatgt caggccagaa 300
 gcagagttta aagaggctca tccacctggc gccatcaatg ttcaaataa cagattaatc 360

<210> 6055
 <211> 328
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-A8

<400> 6055

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gggatctctt ttgaagtcta gctgtagctc ccgttttagtt gagatatcgg ggaactccac 120
tactgccag ctttgtgttt aggaacgtga tacgggatcg tctttctttt tttttggttg 180
cctgtctttg ttactttgta caaacttcag ttcagtgact cggctctaatt accggctccg 240
attagtgaac tgtttctgtc tgattagtaa gctcacgcac anccataggg tggccggtgg 300
cgctccctcc cttctaattt aacttgta 328

<210> 6056

<211> 384

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-030-Q1-E1-A9

<400> 6056

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gaagcatgca cgcaatcgga gcgatggagc acgggtaccc ctgcaacggc tgcggcaagg 120
agaagcggcc gccgctcaat atggggccagc tcaagctgca gatcgccagg accctgctca 180
gcagcctcgc ggcgcgggtc gcccaagaacc gggaccgcgg cttcgggaga tagataggcc 240
gtgccgttgt ancagtacta cagtagtagt tagctgaaga catgcgtcgg ccgactggtg 300
gactgtgccg tctgtgcctt tgttcacctt cgtcacctt taagaaagaa cgtgttgccg 360
tcaaaaaaaaa aaaccaatcc aaaa 384

<210> 6057

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B1

<400> 6057

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atggccgacg gggaggacgc cgccgccgcg cgccgccggg ccgccatcac agactaccgc 120
aagaagctgc tcaactgcag ggagctagag tcgcgcgtcg gcaccgtgag agaaagcctt 180

aaaactgcaa agaaggattt taccaagact gaggacgact taaagtctct gcagagtgtg 240
 gggcaaataa ttggagaagt actccgacct cttgataatg aacgctttat cgtgaaggcc 300
 agcagtggtc cccgatacgt ggtcggttgc cgaagtaaag tggacaagga gaagttgaca 360
 tctggtactc gtgttgactc tgacatgacg accttgacaa taatgcgcac tct 413

<210> 6058

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B10

<400> 6058

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 gctcacgcgt gcctcacctc gacagcagcc ttccctcgcg acagggataa ggacttaagg 120
 aggcgtcgct cgggtgcaaag aatccatggc atggggaggt ctgttcttgt gcatgggccg 180
 cccacgcgag gagcaacaga agtcttgctc tgcagccgct ggtggcttca actacgacac 240
 agctctccaa ggcgccacac gcccacagtc agtgtctacc ttgacctctg aacaaagctg 300
 gtggcgaaaa taggtgacaa ggattcttac gagcgtggat tctttgtgaa ccgattccgt 360
 gttctggtcg gctcaagttc tgacgccttt gtccatgcc a 401

<210> 6059

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B2

<400> 6059

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 taagaaacca cttttgagga ggcacaagaa gaacatggcc accctcttgg cagagtttga 180
 caagattaac aaaaagcttg gctttcggaa ggaggatctt cccaagatcg aggaagagct 240
 tgaattggaa attgccaaaa gtgagctgac tgaacttaag aaagaatgcg ttgaaacaat 300
 ggagactcaa ctcaagaggg aggagtttca agatgaggag atgcctgatg tcaggaaatt 360

ggacatcaga aacttctgt aggcctgac gacgataatc tttgagggcc aacgcaact 419

<210> 6060
<211> 353
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-029-Q1-E1-H8

<400> 6060

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attacactaa ccatacaaat agtgggaaat tagaaatgga gaaaatgagg gactagccta 120
gttctcaaac caagcaccct gttagagaaa catctcattt ggggcaaaca aatagtgtta 180
ctcaagcgca cacagagtag cttaactaa acagtttcac gcaggtcttg catccacagc 240
ttaaagactc caaagtccaa accttcgttc tcaaatgggc cttaatgggc ttgaacagtn 300
tcattgcact tgataacttt gtcagttagt gttccttttt tttccaatt tta 353

<210> 6061
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-G10

<400> 6061

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taccatcccg acgcgatggc cgccggcgcg aagcccgata ccgccgcgcc cccgcaagcg 120
ccttcggcgg cgaaggggggt cttcatgcgc cgcattctcc ccttcctcct cgcgacgaac 180
gtcttcatcg gaggtttatgt atttgccaag acctacaaaa gagaccagga aaagaaaaat 240
gtcagacta ctgccgtgc agcattgtca tcccagcaa gtacatctgc caaggctcca 300
gatcctgctc ctgcacctgc gccgaatcg gttctccac ctctatccga agatgagcag 360
tggaatctgt acaaatggat tctggaagag gagcggaaga ttaaaccacg caacgccact 420
gagaagaag 429

<210> 6062

<211> 351
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G11

 <400> 6062

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 cttgatgaag tcttgccctaa agctgctggg gttgtcttta ttgttgatgc tcaggatttc 120
 ttgtctagca tgcaagctgc tgcagagtac ctttatgaca ttctgacaaa agcatctgta 180
 gttaagaaaa ggatccctgt gcttatattc tgcaacaaga cggataaagt taccgcccac 240
 tcgaaggaat tcatcaagaa acagttggag aaagaattga acaagcttcg ggaatcgagg 300
 aacgccatat cttcagctga catctccgat gaagtccagc tcgggggtccc t 351

<210> 6063
 <211> 407
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G12

 <400> 6063

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 gctacttgca acagcagctg cttgcatcca acccacttgc tctggcgaac gtagctgcat 120
 accagcaaca acaacagctg caacagttta tgccagtgtc cagtcaacta gccatggtga 180
 accctgccgt ctacctacaa ctactttcat ctagcccgtc cgcggtgggc aatgcaccta 240
 cgtacctaca acaacagttg ctgcaacaaa ttgtaccagc tctgactcag ctagctgtgg 300
 caaaccttgc tgctactta caacagttgc ttccattcaa ccaactggct gtgtcaaact 360
 ctgctgcgta cctacaacag cgacaacagt tacttaatcc attggca 407

<210> 6064
 <211> 131
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G4

 <400> 6064

cggccaacgc ttcggcggac ccttggccgg ccccttgggg aaccaaaaag ttttaattagg 60
 ccaatccgca atccaaaccc ggatccaagg ataacaattg cagaaatttg ggaagatgaa 120
 tgggtcaaaa a 131

<210> 6065
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-G5

 <400> 6065

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 tcctgattaa ttagaagctg tagttgtcct tgacttgcaa ccatgtatcc acagatggta 120
 tatcatgcag atgttcgggc gagggagaag gagttggcgg cggcggagac ggagacggag 180
 accatgggct gctgctcctg cgctcccttg ggcaggatga tatccagatg tatcatcaaa 240
 cgcaacgtag gaagagaacg ggcgatgagg tacgacgaga ggacgggaat ggactatgcc 300
 atggcgtagc ctcccccgca gacatgctac gtgcgcccaa cagacgcgcg caccgtcacc 360
 ttggccacca ccaacgcccc cgccgnacat ccggattcac acccacagcg agcgcacgca 420
 gcgacgaaca tgccgct 437

<210> 6066
 <211> 427
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G8

 <400> 6066

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 ctagcactct tccagggggc acccgctgct ggtggaaaca atggttcatg ggaggctttc 180
 ccttcaaata gtggcaacga ggtgacttcg gcatggcaga atcctgcagc tgaacctggg 240
 aaggctgatt gggagcttgc cctcgtagag acagcaagca acttgtccat gcagaagcca 300
 gcaatgtcag gtggtatgga cccgctgctg ctgaatggta tgtatgacca ggggtgttggt 360

cgtcagcacg ttagtgcaca ggtgaccacc gggagtgcc a gcagcgtcgc cctgcctgct 420
cctggac 427

<210> 6067
<211> 172
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-G9

<400> 6067

cccacgcgtc cgccgcttat gctctggaaa cccgttgac ctgtgtaccc gcgccttgct 60
acgaagggtcc caggtggctt aactccagat gaggccacaa aaatgcgac gagaggacat 120
cagttaccac caatttgtaa acttgggaaa aatgggtgtt atgccaacct tg 172

<210> 6068
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H2

<400> 6068

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ttctggcaag gagcttgaga aagagcccaa gttcttgaag aacggcgatg ctggtatggt 120
gaagatgatt cccaccaagc ccatgggtgg ggagacattc tcgcagtatc ctccccttgg 180
taggtttgct gtccgcgaca tgaggcagac agttgctgtt ggagtcacat agagtgtgga 240
gaagaaggac ccgaccggcg ccaagggttac caaggcagct gccaaaaaga aatgatgcaa 300
cctgtcggtta atcctgtatc tgcttttgca atacctgact tgtcactcca tcccgaagtt 360
ttgtatgcgg ttgttactgt tattgtgtac tgt 393

<210> 6069
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H4

<400> 6069

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 tcccaaaaac ggggaagccg ggaaggggaa aaaggggtccc aataaaccca aggggggggg 120
 gaacctttcc caataacccc cccctggggc aattgccggc cgtgacatga gggcaaacgg 180
 ggctgtcgga gtcacaaaga gtgtggagaa gagggaccaa ctggagcaag gtgacgaagg 240
 ctgctgcca gaagaaatga tctatctggc tggtgacgaa ggctgctgcc aagaagaaat 300
 gatctatctg gctgggtgctg tgcttgcttg ttgggtacct cgtggaagct taaaatatct 360
 cgtcctgttg acatccttgc 380

<210> 6070
 <211> 427
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-H5
 <400> 6070

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 catcatgcta ttgctctagg tttgcataca actacattga ttttagtaaa gggtgcttta 120
 gatgcacgcg gttccaaatt aatgccggat aaaaaggatt tcgggtatag ttttccttgc 180
 gacggcccag ggcgcggcgg tacttgtgat atttctgctt gggacgcgtt ttatttggca 240
 gttttctgga tgtaaatac cattggatgg gttacttttt attggcattg gaaacacatt 300
 acattatggc agggcaacgt ttcacaattt aatgaatcct ccacttattt gatgggatgg 360
 ttaagagatt acctatgggt aaactcttca caacttatta atggatataa tccttttggg 420
 atgaata 427

<210> 6071
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-H6
 <400> 6071

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 atgttcccc agttagaatt atagttgctg atggagaaga ggacgttact atcaaggtta 120

gcgatgaagg tggcgggata ccaagaagcg gcctcccag aattttcacg tatctgtaca 180
gactgcaaa gaatcctcct gagctagata gacctaatac tgaaggggta actatggctg 240
ggtatggttt cgggctcccc atcagccgac tctacgctcg gtattttggc ggcgacctgc 300
aaatcatctc gatggaagga tacgggtaccg atgcttacct ccacttgctg cggctgggag 360
attcggagga gcccttgctt tgacggcata tttttgtgga cctccagtac cactcttctc 420
ctgtaact 428

<210> 6072
<211> 248
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H7

<400> 6072

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tagcaatctc tcttcttcac gatcgagaga tagcgcgcgt gcgtgtaatt aagtattata 120
gatgcatgta tgatgcatgc gtgtgtgtat ctatatatca tgtgatggtt tgtatatgag 180
ctagctatag ctagagtcgt gtaatagtat actacaaact aagctaatac aatatccaag 240
tttgctat 248

<210> 6073
<211> 353
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-013-Q1-E1-A3

<400> 6073

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ccccggttaa tggcaacttc cccggttcca atccaacctc ctggtggaac cccaaaaaca 120
acaacaagga aacaggcacc caaccggtcg atgtggtcgc gtcgtgcgac tcgccggcgt 180
tggtgccccg gtgctgacg ttgtccgcgt ggggtgtgga cgggtgtccgg tggtcacctg 240
cttcatctgc tgtgttttgt taggactggt gtacatatga ggacggatga nggcggcgga 300

gggagcacca gggtaaataca actgtcacccg ccgtctacgg aaccggcgaa aaa

353

<210> 6074

<211> 137

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A4

<400> 6074

gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaataa aaaataaaaaa aaaaaaaaaa aaaaaataaa aaaaaggggg gcccccccaa 120

aagtttcaaa cttttttt 137

<210> 6075

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A5

<400> 6075

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cacaaccggc cgcctcagct tctgtctctt ttcctttccc agcgcacag ggaggcggcg 120

attcgcgcg gtgagggcgt ccgaggagac gatggcgacg gagaagctgg gcatcaaggt 180

ggagcgcaac ccgcccagat ccgcctctc cgagctcggc gtccgccagt ggcccaagt 240

ggggtgagc aagagcaagt tcccgtggac ctactccgcc aaggagacgt gctacctgct 300

gcaggggaag gtgaaggtgt acccgaagg ccacggggag gagttcgtgg agatcggcgc 360

gggagacctt gtcgtcttcc ccaa 384

<210> 6076

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A6

<400> 6076

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gaaggcagtc gcggacagga ggaagaggaa gaagaagcgg cagcgagcga ggatgccgtg 120
cctgaacgtg tcgaccaacg tgaacctgga ggggggtggac acctccgcca tcctcgccga 180
agcctccaag tccgtcgcca acatcatcgg caagccccgag gcctacgtga tggttgttct 240
caagggttcg gtgcctatgg catttggagg taccaggag ccagcagctt acggtgagct 300
ggtttccatc ggaggcctga accctgatgt gaacaagaag cttagtgtg gcacgccttc 360
tatcctggag tcaaagctgt 380

<210> 6077

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A7

<400> 6077

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tgtgggctga ctacctctaa tgtgctgaaa actaactgca tcctgtggct cagtatagtg 120
ttcgtcacaa tactgtgtac accacaactg aacatgttat catgtggtct ccgaacccaa 180
cgggtgcagt cgatctcctg catcagctgg aaggattctg tgcacgtaac gctagtcctt 240
actagttcaa tggctaggga atgttgccat tcacaacctt gcagatggta cagttagctg 300
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<210> 6078

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A8

<400> 6078

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gccacgacat gaggcctgg gtcattggct tcgacacccg cctcttcacc gccgtctact 180
ccgggatcgt gtgctccggc gtggccttct acgtgcaggg gatcgtgacg caggcgcgcg 240
ggccggtggt cgtgacggcg ttccagcccc tgtgcatgat catcaccacg gtcctcggct 300

ccaccatact caaagaggag accaccttgg gaagcgtgat cggcgcgggc atcatagtgg 360
tgggggtctt 369

<210> 6079
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-B12

<400> 6079

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atccttcgcc ccgccccggc gagggcgcgc tgcttccacc gccctcccgc tccaccgccg 180
aatcccaact cgaggctggg gttgcgccag cgcggccgtg cctgaccggc cgccctccga 240
agagctcgca tccgcctcct acaccgtcgt cgtcgcggac aagcccgatt cgcttgccga 300
tgacaaggtc gacgagggtta gcgccgcgcc tagtgggtcc gcggaggcgc ccgtatcaga 360
accggtgtca tcagaggcgt ccccgteccc gtc 393

<210> 6080
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-B2

<400> 6080

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cgcaaagaag gttggaggca aaactggagg gcttgggtgt cgtaaaactca caacaaagcc 120
aatgaaagc ctgtatgagc agaaaccaga agagccaaaa cctgctatac ctgccttgac 180
tgctccaact gcaaaagggt gtccatcctt gcattcacgt tttgaatatg tggataacga 240
acaatcatct gtttcaagaa ccggggggatc tggatctcgt gtaaccggtc atgtagcacc 300
acaaaaatca tctgacttct tccaagagta tgggatgggt aatggattcc aaaagaaatc 360
aagcaacgcc tcaaaagctc 380

<210> 6081

<211> 356
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-B5

 <400> 6081

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 aagatgccga agaacaaggg taagggaggc aagaaccgga agcgaggaaa gaacgaggct 120
 gacgacgaca agcgcgagct cgtcttcaag gaagacgggc aggagtacgc gcaggtgacc 180
 cggatgctcg gcaacgggcg gtgcgaggcc atctgcgtcg atggcacgcg ccgcctctgc 240
 catatccggg gtaagatgca caagaaggtc tggatcgcg ctggggacat cgtcctcgtc 300
 ggctccgcg actaccagga cgacaaggcc gacgttatcc tcaagtacat gaacga 356

<210> 6082
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-B6

 <400> 6082

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 gcatcgagtc ctgctggcg gccaccgtca gctgcgagga ggaagacgga cgggtccgaga 180
 gctatggctg gaaatgatgg agaggctgct gctgctgctg ctgctgagag gggagctgca 240
 gcctcaggaa cggaatcat caggagggaa actgagagta gtgtagctgt ctgtacacat 300
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<210> 6083
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-B7

 <400> 6083

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 caccatgcgc aagaccgtgg gcaagcccaa ggtggcgcg tccggcagcc cctggtacgg 180
 ccccgaccgc gtcaagtacc tcggcccctt ctccggcgag ccccgagct acctcaccgg 240
 cgagttcccc ggcgactacg gctgggacac cgccgggctg tccgccgacc ccgagacctt 300
 cgccaagaac cgcgagctgg aggtgatcca ctcccgctgg gccatgctcg gcgcgctcgg 360
 ctgctcttc cc 372

<210> 6084
 <211> 375
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-B8

<400> 6084

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 ggccggccgg tatatacgca agaaagccaa gaaaaacact tctgcctctt cctccatata 180
 caagaaacaa aggtagctag ctagccgcga ctcggttggt agacgattca agcagcagcg 240
 caagatggtg gcgccggtgg tgattgcgtc ggccgggctg ggcatgctgg ccggcggtggc 300
 gatggccaac cggtcnctcg ggaacgggct ctccggcgcc tccaggtggg acgcgcgcnc 360
 gcgctgcgcc acgtg 375

<210> 6085
 <211> 394
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-B9

<400> 6085

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gggctaacac cggcgaagcc gggggcggtc gaggtgcagc gccgacgggt gggcagcggc 180
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 cagatcccg c tcttcagggt cccttgtna gctggcacat gcacaactcc tattcaagta 300
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 taccctggag ctaccgtgag cagcctaact aaaa 394

<210> 6086
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-G5

<400> 6086

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 ggaaagcgtc gctcgcccg ttcttgaga agcgaaagga aaggtatgga ctgtgccttg 120
 gtatactttc tatggtgtat atgctctgct caagcttggt gtcgtcgaca tctgaccgat 180
 ccctgcgtca ggacactagt cttcatcctc cttgtttctc tccgcagagt ggctagcgtc 240
 gagccatacc tgacgtccaa ctccaagagc ccgctagaga gcagtgcgc cgtcggcagc 300
 gctagcgtc caacgaaatc gtcattccaca gacgtcgccc cggcgagcag ccaaaacggc 360
 ggcggcgcaa agcttggtgcg ccatggcgga ta 392

<210> 6087
 <211> 208
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-G6

<400> 6087

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 aaggtctatg ctggagcgag agagaagaga ggaagagctg tctgaaacaa agaaaactat 120
 agacgcgctt aatgggccac gcgagaaatt tccagaagca agaaaactgg cttcattcaa 180
 accgaaattc atttaccac caattgca 208

<210> 6088

<211> 221
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-G7
 <400> 6088
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 cttgccatga agtatttcgt agtactcttc tgcgctagct tcgtttactt tcgagtaaag 120
 aataaggtgt cccttggttc aataatgatt ctgcatgtaa ttacattcca tggcacggcc 180
 attccggcaa caggctcagt aaaaatatct tttttagtgc c 221

<210> 6089
 <211> 414
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-G9
 <400> 6089
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 cttactacca ggaggtggac tactgctcgg aggaggtgag gtcggtggcc ccggccggct 120
 tcggccgcca cggaggcggc gtccagcagc acgtcgtcaa ggagaagttc gaggaggtcg 180
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 acggcttcgt ggtgcgcgag accagggctg aggaggacat caacacctgc accggcgagg 300
 tccacgagcg cacggagagc ttctctgcca gggctaactg agccgcccgg cagccggcat 360
 ccacgcccgt tcgtgcctgc ctgcgtgcct tatgtatgtc tgtggttgac tggt 414

<210> 6090
 <211> 69
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-H1
 <400> 6090
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 gatcctgca 69

<210> 6091
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-H10

 <400> 6091

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 tgatcgagca gaggatgctg gagccgttgc tgcataacca gaagctactg ctgagtgcaa 180
 tgtgcttcat cgttcgtacg ggcaacacat tccttggtc tttgctgtgg gttgactatg 240
 ccagatggat aggcgtccag aagtctcagc aagaggccta aagttctagc agcttgccctg 300
 catgttccgc tgtcactgcc tcactaggca cgttcacaat accatcgatg gcttgccctgc 360
 ctctatagaa tgctgatcta ctcttcactg gaagccccct tatatatagg acaaaaatcc 420
 ca 422

<210> 6092
 <211> 381
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-H12

 <400> 6092

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 aactcctttg tttaaataata ctgggtaatt cttgtagtta tgttgttttg taggtaccta 120
 tagcatattg gcgacatgt catcccgtaa atgtcagcaa agtaggtgag ccgtcaaaac 180
 acgctcttaa acaaggcagc tactagttac tccgatttat tagttatggt cggtttgtat 240
 taatgtaagg ctcttaaata tgaaagacat ggtacggtaa caccgattat tagggatatgt 300
 acaatcctga tattgttgta tgatacttta agtataagac acaactaaaa cacaatataa 360
 tacagtaaca aaataaatgc t 381

<210> 6093
 <211> 142
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H2

<400> 6093

atccaggggt caggacagct tgcaaatat aatggatgag atagctaaag aggacaagga 60

aaaggagaag aggcacaaac gtcgaactgt ggttaaagag gagagacgta aatcaggccc 120

acctcgtctg ggcagacaca aa 142

<210> 6094

<211> 118

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H3

<400> 6094

ccacgcgtcc gaaaaacatg caaaataaaa aataaaaaaa taaataaaaa aaaaaatgaa 60

aataaaaaaa aggcaaaaca attaaattaa aaaataaaaa agagggaaat gaatcaag 118

<210> 6095

<211> 252

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H4

<400> 6095

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tacctcttcc tgtatgcagc attctatttc ttcacgaaac tgcagatcac gaaggcggtc 120

tccggcgtgc tctacttcgg ctacatgctc atcgcggtt atgccttctt tgtactcacc 180

ggcaccattg gcttttatgc ctgcttctgg ttcaccaagc ttatatactc ttcggtgaag 240

attgactagg aa 252

<210> 6096

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H5

<400> 6096

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tgagcccgcc gggggccgac gccgtggtgg acggtgccgg tgccggtgcc ggtgccgctg 180

tccctacgca gaacctgcct aggccttcac acgacagtct ctctgccgat ctgccgatcg 240

cgaggcggaa ctgcgtgcac aggttcctcg agaagagaaa ggacaggata accgcaaagg 300

cgccgtacca agtcaacagt tccgtcggcg ctgaggcgtc caaggcggag aaaccctggc 360

tgggtcctgg gcaaggaaca gg 382

<210> 6097

<211> 286

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H6

<400> 6097

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gcgagcacgg tcggaagagc tagggtttcg ccgcagcgag atgtctgctg acgacgaggt 120

ggagatcgat gacatggatt gtgaaccgca gctgaaggcg tacacttttc cgttgccccg 180

gggccaactc ctccagatca cgctcgacga cctccgcctc ggggaggaga ttgcgcgctg 240

cccctcgtgc tccctctttc ttaacgtcgt ccacaacgcc gaggat 286

<210> 6098

<211> 466

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H8

<400> 6098

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gtccggttaa ccaaccggcg gccggcggtt actgaggcct gagggcgagg cgatggggcg 120

cctccgtgac gggcgagcct tcctccaccg cgcgcttgct ctctcgtcgc tgctccttct 180

cgctccggc gaaatcttct tcgaggaacg gttcgatgat ggggtgggata gccgctgggt 240

gaaatctgat tggaagaaga gccaaggaca agctggaacc ttccgacaca cagcgggaac 300
ctactctgga gaccctgacg ataaaggtat acaaacaact ggggatgccca aacattttgc 360
tatatcagca aaattccac aatttagtaa caaggatcgg acattgggta tccagtactc 420
tctaaagatg aacaagatat tgaatgccgt ggtgcttaca tcaaac 466

<210> 6099

<211> 276

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A1

<400> 6099

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tgcagcacag gggatgccat ggggatgaac atgggtctcca aagggtgtaca gaacgtgctg 180
gactacctcc aggctgactt ccctgatatg gatgtcatca gcatatcagg taacttctgt 240
tctgacaaga agtcagctgc tgtgaactgg atcgat 276

<210> 6100

<211> 396

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-013-Q1-E1-A10

<400> 6100

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ccttgcccc ggggtgttcc ggtgaatggt tttgatcca agcccgaagg cctaatacaa 120
aatgggttct taagcattcc gaattggaat gggcctcccc cgaaaagggtg gaaaaaaagc 180
aatgagatcg aacacagtaa ttacataagg ttataactgg cgcatttcct gacaacgtgg 240
gtaaaaaact tattggcctt gttacaagta gagatgaaat cgctgattta ctaaagcttg 300
atgatgtcat tgatcttgtc attccaagag gcagcaataa gctggtttcg canatcanag 360
catcaactaa gatacctgtc ctcgggtcatg cggatg 396

<210> 6101
 <211> 356
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-A11

 <400> 6101

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 cggcatgcag tacccatggc cgtccctcgc tgctcatgtt gttgggcaat aatctaccca 120
 tacagtatta ttcttggggg cttaccggga aatttgagaa tcatcatcaa tgtattataa 180
 tcgtctcatt aggtangatg actggatgat gacgaatagt caactagtct tcgtctcctg 240
 tctttttttt ttattctgtg cgggatactg aatgtggagt ataattatgt ttgcaacaga 300
 ttaaaccaca tatgaatatc aattgcaagt tgcactgcaa aaaacaaaac acaaac 356

<210> 6102
 <211> 65
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-A12

 <400> 6102

 ctccgccaac gataatctcc gctgcatgct ctatccatgg ttgttctcctg ctgctcatga 60
 ttgtt 65

<210> 6103
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-012-Q1-E1-E2

 <400> 6103

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 tcaacgaaat aaaccgcgtc cgtcaccctt caacgtcctc ttctttcttca tcgccgccat 120
 caaccccggc aatggcaggt tcatcatcgg cgaggaagag gaataggctg ctggcctcgg 180
 acatgagtcg tgtgcgttta cttttacctg tgactgtgag tgatcgatcg attgctgtgt 240

atcaattact cgtgatgaga cctcgaaggt anggtgtcgc gttgggcgga tggcgcagct 300
 gggcgtggcc ttctccatca tcggcgagat catcacggng aaggcgcgcg tggcgcagct 360
 caacatcgag acgggggtgc ccatcaacga gatagagccg ctcgatcatct tcaacg 416

<210> 6104
 <211> 380
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-E3
 <400> 6104

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 cgcacatgag tggccgtgga cgagggcgag gagagcctgc acgcgctcaa ctggtgcctc 180
 gccaacgtcg tctccccggc aggagggcgac acgctggtgc tcgtccacgc ccgccgcccg 240
 cgcccggtct acgccgccat ggacagcgca gggtagatga tgaccgcgga cgtgcggggcg 300
 aaccgtcgag aggcacgcca acgccgtctc ggccggcgcg gtcgacaagg ccaagcgcg 360
 ctgcgcggac caccgcgacg 380

<210> 6105
 <211> 377
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-E5
 <400> 6105

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 cagcaactga tcgaacatca ttacaagat gggttcttaa gcatatggta gaattgcatc 180
 cgtaagcact gaagctgcca tgcaagtga agtgcttctg gtcccgacct cagttagaga 240
 aaaaaaactc tgcagttgag caagccgttt tactttgttt cagtgttaata tttatgacgt 300
 attcccagtt ctttttcaaa aaaaaaaaaa aaaaaaaaaa aaacaaaaaa aataaaaaaa 360
 aggggggaca cactaaa 377

<210> 6106
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-E6

 <400> 6106

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 ccaaagaaaa agctacggcg gacagagcta caaatacaat ggggttacct cactgcctgc 180
 acagcggaac ctaactccgc cccccacact ctatccacag cagccaatgt cctcttcac 240
 agaaaactac agataccaca gattttcctc ttcgtcaata cctgattcaa gtgggtggttc 300
 aaaaagccga gcgaacctta atatatgatg ggatatgtaa gtccttatcc attatcacct 360
 ggagtgtggg aaaaaaacat gacaactggg gttttttggg tctcacggtt tttgatcctt 420
 ttt 423

<210> 6107
 <211> 432
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-E7

 <400> 6107

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 ttaaggggtgc aaaagttgtc tttgacagaa ctactggccg ttcgaaaggc tatgggttttg 180
 taaagtttgc agattcggat gaacagacac gggcaatgac tgaaatgaat ggacaatact 240
 gttctagcag ggccatgcgc cttggaccag catcgagcag gaagaatact ggtggaccac 300
 aaccatcgag tgctattttac cagaacaccc aaggaactga ttctgatagc gatccgaaca 360
 atactactgt atttgttggc ggccttgacc cgagtgtgac tgacgagctt ctgaagcaaa 420
 ctttcagtcc at 432

<210> 6108
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-E9

 <400> 6108

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 cgggcctgct cttcctctac atcgccggct ggatcgggtg ggtcggcagg agctacctca 180
 tcgccatcag cggcgagaag aagcccccca tgaggagat catcatcgac gtcgagctcg 240
 ccacccgcct cctccccagg gggttcatct ggcccgtcgc cgcctaccgc gagctcatca 300
 acggggacct cgtcgtcgac gacaaggaca tcggctacta ctagctgcgc ttgttcacct 360
 gcttgcactg tgcataatata ttgctgctgc cgagctgggc gcttggatag tacgtgggga 420
 aacatggatg gctt 434

<210> 6109
 <211> 405
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-012-Q1-E1-F1

 <400> 6109

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 gtgcagagag atcgagatcc ggaggccgag agtgggagcg ccaccaccag cgtctgcggc 120
 aatggcgggc acggtgacgg tcccgggggc gtcgaccccc tccacgccgc tgctcaagga 180
 cgagctcgac atcgtgatcc cgacgatccg caacctcgac ttcctggaga tgtggcggcc 240
 cttcttccag ccctaccacc tcatcatcgt gcacgacggc gacccgacaa gaccatcaac 300
 gtgcccgaag gcttcgacta cgagctctac aaccgcaacg acatcaaccg catcctcggg 360
 cccaaagcct cctgcatctc cttcaaggac tccgcctgcc gctgc 405

<210> 6110
 <211> 416
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F12

<400> 6110

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tcctgcccgc ccgcccgtgc cgcgcgacgc gtcgttcttg ccggccgcgc cccacctccg 180

ccctctcctc ctccagggga atcggatacg ccacaggctg cgcgatgggtg ctgtgggtct 240

tcgggtacgg ctccctcatc tggaaccccg gcttcgactt cgacgacaaa atcctcggct 300

tcatcaaggc ctacaagcgc acctttaatc tcgcttgcat tgaccacaga ggcacaccgg 360

agcatccggc gaggacctgc acgcttgaaa ccgacgacga ggccatatgc cgggga 416

<210> 6111

<211> 274

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F2

<400> 6111

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actatgcaga aaaatttgca aaatcaggct ttactggagg acttaactac tacagggtgca 120

tagacaggag ttgggagctt tctgcggcat ggactggagc tccgataaaa gttccgtcga 180

aattcattgt tggggacctt gacattacat acaacgcccc gggggtaccg gactacattc 240

acaaggttgg cttcaaggca agcgtgccaa atct 274

<210> 6112

<211> 394

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-012-Q1-E1-F4

<400> 6112

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ctcnccagat ttggccgccc ccgccgctga cccaggttgt cttgatggcg cccgctgtag 120

aagccgtgaa ggagacaggc accttccaga aagttcctgc cttgaacgaa aggataactgt 180
catccatgtc caggaggtct gttgctgcac acccttggca tgatctggag ataggctctg 240
gtgctccaac catattcaac tgcgtcattg agataccaag gggcagcaag ggtataatat 300
gaacttggag gggaagactg gactgattca agtggaccgt gtgctgtatt caacagttgt 360
ttaccctcac aacaatggat tcattcctcg cacg 394

<210> 6113
<211> 255
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F5

<400> 6113

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aagccttacg cgctctacat ttggaggata tacgacttcc ccttgcgtag tcacgaactt 120
tctaagggtcc tcttcacggc atccaagttg acagggataa gttgaacaag tacggtcgtc 180
ctttactatg atatactact aaaccataaa taggattatc cgcattcacac ttactgtaca 240
gcgtattatc attgt 255

<210> 6114
<211> 231
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F6

<400> 6114

acgagctctt ccacaccgc cctctctctt gtgggtcggc ggccgagtgt ctgcgtcgtc 60
cacggagatc agggatcggc ggcgggggtat ggcaaggag cgtcgggaga taaagaggat 120
agagagcgcg gcggcacggc aggtcacgtt ctccaagcgc cgccgcggcc tctacaagaa 180
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<210> 6115
<211> 315
<212> DNA
<213> Zea mays

<210> 6120
 <211> 236
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-C8

 <400> 6120

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 gtcaccacaa acagaaacta aagcaagtgt tggatttaaa gctgggtgta aggattataa 120
 attgacttac tacaccccggt agtacgaaac caaggatact gatatcttgg cagcattccg 180
 agtaactcct cagctcgggg ttccgcctga agaaacagga gctgcagtag ctgcgg 236

<210> 6121
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-C9

 <400> 6121

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 gggaagcctg cgaagatcgg agagtggggt ggatacgccg gcgatcgctg ggatctgagg 120
 gctactccgg accggctgat cgaggtgaag gtcacggcgg acaacagcag ctgcatccgc 180
 tccatctcct tcatctacat cggagccgat ggcaaaccgt acgaggaggg gccatggggt 240
 ttcggccatg ctggcacgga gtacaagatt gatctgtgca ggttcgacga gagcttgacg 300
 gagatctccg ggaccacggg cccagcctac aacattgaca atctgggtcaa gtctctcaaa 360
 ttcgtcacca acaaacgcgc ttacggaccg tacggcaggg acgagggcac cccgttccgt 420
 gtcaaggtga tgaa 434

<210> 6122
 <211> 260
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-D1

 <400> 6122

 acgcgtggac cgctcaccta caacctacta gaaggcgaac acaaccgtac attcacttct 60

catcgcatcc gtacgacacg cgcaggatca gtacagaccg aggcgcccgc gggttcagcat 120
 tccttccatg caccgtacaa gagacaattt gctggagtct tcgacacgat caggggttccg 180
 atggcccagc aatggatgat cctgccgttc ctggggcgg tagaacctgc ggtggctgct 240
 ctggtcacgc tcccgggtgcc 260

<210> 6123
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-D10
 <400> 6123

gctacttttg ttatgtcaac tgtgggttaag aatgggtggac ttgcacctgg tggcttcaac 60
 tttgacgcca aattgcggag ggaaagcact gatgttgagg acttgtttct tgctcatatc 120
 tccggaatgg acaccctggc ccgtggcctc cgcaacgccg ccaagctgat cgaggatggt 180
 tccctagatg ctctcgctcg caagcgggtac cggagctttg atagtgagat ggggtgccttg 240
 atcgaggctg ggaaaggaga ctttgaggcg ctggagaaga aggtccttga gtgggggtgag 300
 cccactgttc cgtccggcaa gcaggaactg gcggagattc tgttccactc tgctctatag 360
 atggcgccat gtccgtagcg gtagctcctg gaataagcaa gcactgagcc tgcgcccctc 420
 ctaacgcgcg 430

<210> 6124
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-D11
 <400> 6124

cggacgcgtg ggaactacct tcgccgtct ccttgatccg caattttctc ccacatctct 60
 cttctgcca cttgcctcca tcttggcctc cccctccact cccaccccc gaacatccgg 120
 cgccgtccac acccttgac cccgaactcc ctgctccttc gtggccacga tgggggcgtc 180
 catggcatcg ccttaggggc gatcgatctg ggagaaagtg ctggagcacg tggcgctgta 240
 ccaccagcag caacggaggc agaagctacg caagagcctc acctacaccg gcagtgagtt 300

6125 6126 429 DNA Zea mays

ctcgttcgct gtccgggggtc gtgggggacga ccccgccctcc acgtccggtg gggcacagaa 360
cgaggacatg cctcttgagc acgtctttaa aatcattaga tccgatggca aaagtgtgtg 420
ttta 424

<210> 6125
<211> 401
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-012-Q1-E1-D12

<400> 6125

gaactcgtca gatatgtag catgtggaga ggaccttggc cttatccctg cttgtgttca 60
ccctgttatg caagaactgg gggttgattgg attgcgtatc caaagaatgc ctagtgagcc 120
aaacttgga tttgggtattc cttctcagta tagctatatg acggttttgtg ctccctcatg 180
tcatgactgc tctacattac gtgcttggtg ggaagaagat gaaggaagaa gaagtcgttt 240
ctacaagact gtagttggca gtgatgagga ggccccatct cgttgacccc cggaagtagt 300
gcacttcatt gttcagcagc attttgacgc tccatcaatg tgggcaatct ttccacttca 360
ggacctcctt gcaactgaaag acaagtacna cacaagacca g 401

<210> 6126
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D2

<400> 6126

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gagcgtccgt gtagctgccg tcgtcgcgac cgaggccgcg cagatcgact acagctcaag 120
cgtctcgtag gtgttccctg gccttgatca acaaacaacc agtcggtgta gagctaagtt 180
ctggatggta tggtagaat ttgggtcggt gacactgaca cgcattgttg tgacgctgca 240
gggtgttccc gatggaggcc tgcgacctgc ttgggtggcg cgcgtgcaac gggcccatgt 300
gcccggaggg caagcccgcc tcggggggcg cggcggcgag caggagtgtg gtcgggggtg 360

acagggacta cctgtcctac gacgagccaa agacgtaagc agcagctagc aactaccata 420
ggataaccc 429

<210> 6127
<211> 431
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-012-Q1-E1-D3

<400> 6127

ttccgggacc acccacgcgt ccggcacagt ccaatattgc cgtctccctt ttgcgtgagc 60
aaagaaagag agcgagaaga gcagtcgcca tgtctggcat catccacaag atcgaggaga 120
agctccacat ggggggcgac cacaagaagg aggatgagca ccacaagaag gccgaggagc 180
accacaagaa ggaggagggg gagcaccaca agaaggacgg cggggagcat aaggaaggca 240
tcgtggagaa gatcaaggac aagatcacgg gcgagcacgg cgacaagtcc ggcgaccaca 300
aggaaaagaa ggacaggaaa aagaagaagg agaagaagaa gcacggcgag ggccacgacc 360
acgacggcgg ccacagtagc agcagcagcg acagcgactg agatctggtg tcgcagcaaa 420
ngtgcaacac a 431

<210> 6128
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D5

<400> 6128

cggacgcgtg ggcgagcgcg tgggcggcgg cgacgagaag tggcgagccc cgagagcggg 60
tttagttaga ggctacgggc ggtcgggccc ggcggcggcg gcggccatga gcagcgggag 120
cgagagcact accgccagca ggtggctcga gctggccacg ctgcgcgcgc tggcgcgcca 180
cgccgcggag cagcttcggc tgccgcgggc cggcacgtcg gcgtcggcgt cgctcgtcgtc 240
gccgtggcgc gggcgcgagg accacctcca cggccacggc aagacggcca aggtgatgca 300
cctgctgctc tggggaccca agtgaagcgg cggcgagagg ccaccgtacc gccgggctct 360
cccgccggcg ttgctcgttt tgctctgcct gcaatccgcc ccgcacggac tgtactgtac 420

ctatacacct atatactacg

440

<210> 6129

<211> 265

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D6

<400> 6129

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ttccggccca ctgcgtgtgc tcaagggtt caagaacttg cccacgggga tgccgtccgt 120

gctcctcgta actggactca cctggctctc cttggttccc gttcatctc tacgacaccg 180

actgaatggc ccttaaattc aacaacggca accccaaggt taaaacccc caattcccgg 240

ctttcaaaa aggcttcaaa ttggg 265

<210> 6130

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D7

<400> 6130

gaatcatcat cagtgcctca tgcacatcat gctactgaga gactgaaaaa atatctttgt 60

tcccctgtgc tagagaacat gtattggcag gctttcactt cctatcacga accattgttg 120

agtaggtcgg actgataact agagtttctt cttcagggtt ccgttggtatt gttttgctct 180

tatcttatct tgggtggtgt ggcaaagaat ttgttggtgt aacggttgat gcagctagag 240

ttggcagcga cattttctgt aagagcacac ggcagggacg ttaattaaat atattcctct 300

gtagcggttg atggaaaaaa aacaagatac aggacagaat aacataagcg gcggcagcca 360

caaaa 365

<210> 6131

<211> 447

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-012-Q1-E1-D8

<400> 6131

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cagaggtgcg acgtacgacg acgacgacgc aggcgccaca catggcatcc cagctctccg 120
ccgccgtgcc ccggttccac ggcctccggg gctacgccgc gccaggtcc gcggtggcag 180
cgctgccgtc cgtgaggggtg ggcaggaaga ggtcgtcgtc gcagggcatc cgctgcgact 240
acatcggctc cgccaccaac ctgatcatgg tgacgacgac gacgctgatg ctgttcgcgg 300
ggcggttcgg gctggcgccg tccgcgaacc gcaaggcgac ggccgggctg aagctggagg 360
cgcgcgactc cggcctgcag acgggtgacc ccgccgggtt cnacctcgcc gacacgctgg 420
cctgccgcgc cgtcggccac atcctcg 447

<210> 6132

<211> 66

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D9

<400> 6132

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ttcacg .66

<210> 6133

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-E10

<400> 6133

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atgtgtggtg gtgcgacccg cgccgagctc atcccgacca cgccggcgcg ccgcggcggc 120
gcggcgtggc ccgccggcaa gtgcaagcgg cggaaggcga acgacttcga ggccgcgttc 180
cgggagttcg acgaggactc cgaggaggag gaggaggacg acgaggggggt ggtggagagc 240
aagcccgcct tcgtcgtcgt cgctcgtcc gcggcgacgc agcccagggc gcgccaggag 300

cagcggagcc ggcgcgggc gcccgaccag cagcagtaca ggggcgtccg gcgccgcccg 360
tggggcaagt gggccgccga gatccgcgac cccg 394

<210> 6134
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-C5

<400> 6134

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ggtgaaatct tgggtgaccg ttatcctcaa atggccaaca cctggaagga ctctgagacc 120
ccgccattgt cttcttgga atctgagtag ccaatctggt gtctcttcaa ttctgccacc 180
gtcacattgg tgtatctcca aattgtcgga ctgcagaaga tactcaggtg cactttgcaa 240
aagcgtccat atgatgtgct tgccttttgc aagccatgat gtttggtact tgggtgtgtat 300
tgcatgcctc aatttgtatc aagagtattt acccatgagt atagcttgaa gggttaaaac 360
actggttcga cgaataacca tat 383

<210> 6135
<211> 425
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-012-Q1-E1-E11

<400> 6135

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cctctgggga gcaacttggc aggggtacaa agatgaccct ctacctcaag gatgatcagt 120
tggagtacct tgaggagcgc cgcctcaagg atctgatcaa gaagcactcc gagttcatca 180
gctacccaat ctctctctgg attgagaaga cactgagaa ggagatctct gatgatgaag 240
atgaggagga taagaaggat gaggagggtg aggttgagga tgttgatgat gaaaaggaag 300
aaaaggaaaa gaagaagaag aagatcaagg aggtttctca tgagtggcaa ttggtaaaca 360
agcagaagcc aatctggatg angaagcctg aagagattac canagaagag tatgctgctt 420
tctac 425

<210> 6136
<211> 202
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A8

<400> 6136

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tgcctgtcca ttgagatctc tttcacgccc ctttctgcca tcgcacaact gagccgcagg 120
tactactatc cacttggcag gtcagtatct cctgcgagga caaccattga ttatttgaag 180
gtggaggtgg tacactcatc at 202

<210> 6137
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A9

<400> 6137

aagcctccga ccaagcctcc gaacaaatth acagacgatg ctgaactcca aagatctgag 60
ctttgtgggg tatacgtaca aaaacttcga tgcggtgaaa gcaataaaaa tttcagatct 120
gcaaaggaat tcatctctaa caaggccttc cattgggtca atattcggtc caccaggcat 180
ggattctccc atggaaccaa acgggagggg cacacatatg cacacagttt catctggtga 240
tccaatgatt ccctaacctg cagtgtctgtt tgtcctcggc aaatttctga actaaatcag 300
catgcaaacy cctggatgat gtggctccag ctggataacc tgctcattht tagccaggth 360
tctgctthtct caatcgtggg caagcggtht gtagaaatcc accagagtht ctaattgtaa 420
aatagtatt 429

<210> 6138
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-B1

<400> 6138

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 gcgcttgcca tgtgtccagc agaaccatat gtccctgtcag gaggaagga caaatttgtt 120
 gtcttgtgga gcatccaaga ccacatatct gcccttgggg attcctcgtc ttctcccga 180
 gcatctggca gcaagcagtc tggcaaaatt gcaaatgaaa aggagagtcc taaagttgat 240
 cctagaggta tattccatgg ccatgacagt actgttgaag atgttcagtt ctgcccttcc 300
 agtgcgcagg agttttgtac tgtgggtgat gatgcttgtc ttattctgtg ggatgctcga 360
 actggcactg acccagctgt taaagggtga gacagctcac agtggagatg ttcatttgtt 420
 ggattgggat ccccttgatg 440

<210> 6139
 <211> 331
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-B10
 <400> 6139

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 aaggccatgg ccaacgcacc ggcggaatc caatggaggc aactggggag gaggcgcagc 120
 agctgaccat cttctacagc ggacaagtgg tcgtcttcca caggttcccc tccgccaatg 180
 tcaaggatct gctgcacatc ttcagcccgc cgggggctca cgctgtgggtg tacagtgccg 240
 gtgccggtgc ccgtgctgct gtctctacgc ataagttgcc tatgccctct cagcagctc 300
 tctctgccga tctgccaatc gctatgctga a 331

<210> 6140
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-B11
 <400> 6140

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 gctactcaga gaggaagcag tgtgggtgat gctggagggtg cggctgatag agtgcttaat 120
 cagctactga cagaaatgga tggcatgaat gccaaagaaa ctgtgtttat tattggagct 180

acaaacaggc ctgacatcat tgaccctgct ctgctgaggc cagggcgtct tgaccagctg 240
 atctacattc cactgcctga tgagcagtct aggctccaga tcttcaaggc ctgccttagg 300
 aagtcccctg tggcgaagga tgtggacttg aatgctcttg ctaagtacac tcaagggttc 360
 agtggagcag atatcacaga aatttgccag cgtgctgca aatatgcaat cagagagaac 420
 a 421

<210> 6141
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-B12
 <400> 6141

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 ttcgtcgtca gggccagctc cagccctcca gccaaagcaag gtgccgacag gcagctgtgg 180
 ttcgcgtcca agcagtcctt ctcctacctc gatggcacgc tgcccggcga ctatggcttc 240
 gacccgctgg gcctctcgga cccggagggc accggggggt tcatcgagcc caagtggctg 300
 gcctatggcg aggtgatcaa cggccgctac gccatgctgg gcgcgggtgg cgccatcgcc 360
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<210> 6142
 <211> 376
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-012-Q1-E1-B4
 <400> 6142

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 tgaatcaggc gaggcgccctt agaccgccgc tgatgatgcc aggctcagt acccagtcca 120
 gcatgccggc aatgtatgca aataacatgc aggggcatcc ccagatggct ctgctgcaac 180
 agcggcaaca gatgctctcg ttcggctctc gtttgctct ctcggccatc aacccccggt 240

catcctcgtc ggcacccaac atgatgttca accatggcat gcccaactcg gcagctccta 300
atcatcaccc ttgctgaga taccctcagg ggaacattca natgtaggtt agtgagatga 360
gttttttcat tttttg 376

<210> 6143
<211> 64
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-B6

<400> 6143

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gttg 64

<210> 6144
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-B8

<400> 6144

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cctcctgttg tttggtgcca tcgagttctt caagtggacg cagctcctat cgacatggag 120
aggagtggca ttcactgccg cagggatggc gctggtgaca gggctcatgc acgtcttcat 180
catgttctcc caggctgagc ggctgagctc agccaaggcg gcacggaacc gggtaagaa 240
ggaatgaaaa cggaggggtg aaatgtgatt ctgggctcga tttatgggca gctttcaaaa 300
tgactcgatt catattaatg tatacagcac caaattccag acagaaacag gatgctctgc 360
tcctcttgta tttgtgtgca ggaaagaatt ttagggagtt catttttgcc cccctct 417

<210> 6145
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-B9

<400> 6145

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 ttgggccgac cgtcagcagc ttcccggcct ccgtcgtgct cagcagcgag taatttatgt 120
 cggagcagtt actgagacgc cctcctttgc gtcgtgctcg ccagatcaag cctcgcgctcg 180
 tcgatttgcg cagttcatgt tccggcaatcg gtttagtctc cgtcgaactt ctatttaccg 240
 tgacgccgag ctcccttcaac actgccccac tccgttgctg ttattccgct gcctcacttc 300
 gatgtcagtt ccttcatgac atctcctact tgtgttcgcg ccgacaaaag gatcctaaga 360
 gaatgtggaa aaacaagccc caagttgatg cctcaaatac tcgacgaaaa gcctgaact 419

<210> 6146

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-C10

<400> 6146

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 cagcagcacc tgtagcagtc atggacgcca gcggagccgg tagcaagggg aagaaggggg 120
 cggccggggcg caaggcaggc ggccccagga agaagtcggt gacgcggtcc gtcaaggccg 180
 ggctgcagtt ccccgtcggc cggatcgggc gctacctcaa gaagggccgg tacgcgcagc 240
 gcgtgggcac tggcgccccc gtctacctcg ccgccgtcct ggagtacctc gccgccgagg 300
 ttctggagtt ggcagggaac gcggcgaaag acaacaagaa gacgcgcata atcccgcgcc 360
 acgtgctcct ggcgatccgc aacgacgagg agctcgggaa gctgctggcc ggcg 414

<210> 6147

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A5

<400> 6147

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 gggcctcgct cgccgctggg cgggtggagct ccccgacgcc tcctcctcct ccccgccgt 180

ccccgacccg cccggcttca ccagatccgc gcctgacgcg gacgacgccg ctggagcgcg 240
ccagcgcaag gactccgagg ctgcatggaa ggcgcagaag gcttgggaag ttgcgaggc 300
tccgttcaag aacctgatga tgatgggatt tatgatgtgg atggcagga gcaactgtcca 360
cctcttcagc atcggaatta ccttctctgc tctgtggcaa cccctcaacg ctctccga 418

<210> 6148
<211> 128
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-C3
<400> 6148

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caataatgga ttcttgctgg atcacacatt tataactaga ataatcgaat gcttgcttcc 120
ttggttac 128

<210> 6149
<211> 351
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-C4
<400> 6149

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cgtcagttgg tctgaggggtg ttaaccagcc atgattagga gcgttggggg taccctaata 120
tatggtactc gacaagaatc atcataccac tgtaactga ctagttgcat tccattgtac 180
ttgctttcaa atagattcat gcattgatat ctttcttttg ggtactatgt tattactc 240
aaataccatt gtctgtgatc tttgggtgat cttggcattt taatttgatt caatccatgt 300
ctctaggttg tttattaatc cttacaaac tctctcctat ctgtggacta a 351

<210> 6150
<211> 434
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-G7

<400> 6150

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gctaccgcta tgctactgga cgtggaatgc ctgatactgg catgcataat gttgggtgctg 180

tgatgccatc tccatatgag atgggagggg tggcaatgag agatgctggg gtctcacaac 240

ctgttccaat tggggcacta gccactgcgc ttgctaacgc ctcaccagat tagcaaagac 300

tgatgcttgg tgagaacctg tatectcttg ttgaacagct ggagcgtgag caggctgcca 360

aggtcactgg catgcttttg gagatgggac agacggaggt ctctcactgc tggagtcgcc 420

agatgctctc aagg 434

<210> 6151

<211> 346

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H10

<400> 6151

taaaaaaaaa aaaaaaaaaa aatcaataaa aaaaaaagac aaaaaaataa gttcatcccc 60

agtaaattgg tcacctgaaa tgtaaggggg attactctaa agactgaact ctaaattaca 120

ttgggtcgggt cgctcattc gtctgtcaca ttgtcatcat cttcgggtgc gggatgtctg 180

ttatccaggt tgagaatagg gaatccgctg ccgtgagtaa actatatgct gattctggaa 240

aataccgctt acatcagctg gcgaatgcac aatacgtatc tcaacggtat cagtttccac 300

ttattcgcca cctgggttga gggcgtgaat ggcagcttta tgggcc 346

<210> 6152

<211> 431

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-011-Q1-E1-H11

<400> 6152

ccacgcttcg gaagggaat taatacccct ttgaattaca ttcaaaaaaaaa gtttaaggga 60

acctcaacaa aactcccggg acaatcaagg ccaaacggg gcattaactt ggtcccttgc 120

cggccaatcc ccaatggttt ttgactaacc aaaatgtctt tgctttcgac tacacaactc 180
 aagttctgtt tttcatcatg ctgtcgtgcc tgatttcagt ctcggtgaac ttcagcactt 240
 ttctcgtgat cgggaagacg tctcctgtaa cctacaaagt acttggccat ctgaaaacat 300
 gcttggtcct cacctttggc tatgtcctgc ttcacgacct atttagctgg agaaacatac 360
 ttgggatcct aatcgtggta attgggatgg ttctgtactt gtacttctgc actanagaga 420
 ctcancaaat a 431

<210> 6153
 <211> 117
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H12

<400> 6153

tgggtccctgg ccggccaatc ctccaaggga ttttggccaa accaaatggc cttggcttcc 60
 aataaaaaaaaa tccagttccg gttttcaaca aggcggcctt gccggattca atccccg 117

<210> 6154
 <211> 444
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-011-Q1-E1-H2

<400> 6154

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 ataatccggg tgctttccaa gaatcctcca accacccttg gtgccaagc aagccacaaa 120
 aagtgggcaa accaaagagg acagcaatgc taggaaaatg acgatgacaa agacgagggc 180
 atcgggcaac atacttgta gccgtaatga cgacgggcca tgctatctag attccggtct 240
 taatgagtac gtctgcagaa agactaataa gtgctataag agcttgggtgc tctgcgtggc 300
 gagttgtcaa ccatcatcat gaattcaaga tactgcggag acatcatgat actgcggaga 360
 cagacggcca gagatgangc tagctagatg ccgtttcacc annatattat gtaacaccca 420
 aatctcccat tttaagaaat aaat 444

<210> 6155
 <211> 264
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-H3

 <400> 6155

 cccaatttta aaatccggtt gacaagacct gcagttgaat ttttaaattt taaattcctg 60
 gggcctactt taattgaacg gggaactggt gccactaatt taaaccgttt tgcaattcca 120
 atcctttaat taactaaggg cgttgggaat taataattaa aattgtttta ttaatgttat 180
 taattttttt aaatgggtct atttacctac tatgtattat tatcgaatta agaggataaa 240
 aaatataagg attatgaata tatg 264

<210> 6156
 <211> 366
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-H4

 <400> 6156

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 atgccgtgcc tgaacgtgtc gaccaacgtg aacctgaagg ggggtggacac ctccgccatc 120
 ctgcgccgaag cctccaagtc cgtcgccaac atcatcgga agccccgaggc ctacgtgatg 180
 gttgtttctca agggttcggg gcctatggca tttggaggta cccaagagcc agcagcttac 240
 ggtgagctgg tttccatcgg aggcctgaac cctgatgtga acaagaagct tagtgctggc 300
 atcgcttcta tcttgagtc aaagctgtct gttcccaagt cacgcttcta cctcaagttc 360
 tatgac 366

<210> 6157
 <211> 326
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-H6

 <400> 6157

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ccatggcttc atcgggtggcc gccacggtaa gcacattcct gggcaccgc ctggcgggtgc 120
cggagccaca gaacgggtgc atcgtgggtcc ggttcgggtt cgggttggtc ggcagggcta 180
aacctgctcc gaaaaatgtg gcaactatat cgaactcctc tgaccgaccg ctgtagttcc 240
cccgggccgt ggcgcccag tatctggatg ggtcactggt cagcaattac gggttcgatc 300
cgttcggtct cgggaagccc gtgggg 326

<210> 6158

<211> 223

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H8

<400> 6158

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gacatgactg gatgatattc atccaggggt tcacctcttg ttttttttc ttctccattt 120
ttgagggatt ttgttgacag gcgatttggc ctgtctcaga tgagggtttc cttctctgct 180
cttagtagag ttatctccta tgattctgtc catgagacat tgg 223

<210> 6159

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A10

<400> 6159

gaaggagggtg gtgctccacg tgtatgacgt gaccaacagt gactccgaga agacgaacaa 60
caccatcctc cagatcaacc gcattctcaa ggaccgcatc ggcctcggcg gcattctcca 120
cagcgccgtc caggtagtgg gcctgggtcc cctctcccc ttccctcgcc aatcgctcag 180
atcccaggga ccgacgcttg cgtgccgctt ctccagatcc ctaaattctca cgccatttct 240
tgaacccctc aacgcaggtc tatggctagg acgagtggtc gttcgggttc tgcgagtccg 300
gcagcggcgt gtttagttgc cccataggca agaaccccat gtacacctac cgggagcgca 360
tcgtcctcgg ggagaccgag tgcggcatcg ccgccgttaa ccggatcctg cgggagctc 419

<210> 6160
 <211> 79
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-A3

 <400> 6160

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 aatccggtaa atccgaacc 79

<210> 6161
 <211> 225
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-A4

 <400> 6161

 agattcaagc taccataaat atattcatac tgccctataa caaattacaa gatcagctat 60
 ggcaatctcc agtaagcatc tgtagtaag acgggggtgc gccattacat gtcactgcaa 120
 cattagacta atcacagcta tacaggctgc attggcgtag gtctgacaag taggtgaact 180
 tgcattctca acgacaggga cgcattgcac gaggggtggg ggggg 225

<210> 6162
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-F10

 <400> 6162

 ctccctacc ccaacgggtc ctggtcaagg tccgggtcct tggccaaaag gaaaaaaatg 60
 gcggcttcgg actttgagta ccgttgcttc gttggcggcc tcgcctgggc caccgacgac 120
 cactccctca acaacgcctt cagcacctac ggcgaggctc tcgagtcgaa gatcatcctg 180
 gatcgggaga cgcagaggtc ccgcggtctc ggcttcgtca ccttctccac ggaggacgcg 240
 atgcgcagcg ccatcgaggg catgaacggc aaggagctcg acggccgcaa catcaccgtt 300
 aacgaggccc agtcccgcgg cggccgtgga ggcggtggtg gcggatacgg tggcgggcgc 360

<210> 6163
 <211> 317
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F12

<400> 6163

ccaagcctcc ggtttaagca attcccgaac ctgttaaaaa tccgacattg cctaaccgga 60
 tccaacaagc cttaacggca aaaacaacct ttgccaaatt ggaaaacctg gcatgataac 120
 cgtataactg ccgttcgatg cagtcaattg tgcaaaccag catcattggc tgctgattgc 180
 aaaatttgca atgcccgatg gggtcattgat ggaaggggac gattgggact gttgggcttt 240
 tatggttggg ccctgtggta atttagacat gtcgaataaa cgcgatacga gcaatgaaag 300
 atcgatgctg atcattg 317

<210> 6164
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F2

<400> 6164

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 gcgccatcgc cgccggcgcg tacgctctgc acgagaagca caaggccaag aaggacccgg 180
 agaacgagca cggccaccgg gtcaaggagg aggtggccgc cgtcgccgcc gtgggctccg 240
 ccgggttcgc cttccacgag catcacgaga agaaggacgc caagaagcac gccacaact 300
 gatccgtcgc aggtgcctc agccgaagca gcagcacatc gtcgcggttg ctgtttcatc 360
 tgttccccca acctcgtcgt cgtctacggg ttgccgggca ggccttgatt tgaggctttg 420
 agctaccgat atttcac 438

<210> 6165
 <211> 383
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-011-Q1-E1-F4

<400> 6165

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ttacccaac aaaaggcaat tgttgaagg ccaaattaag aaaccggtaa actggtaaaa 120

cctaagttaa aattaattta attatataat taaaaaaaat ttaattgtaa agtaaaattg 180

taaatctgaa tgtttatgcc actttgattt gattttaagc gtanggaat cttctgattt 240

tgcggggagt aaaccactaa aggttcattg tttgattttt cattatatgt ggcacagaaa 300

tatcttcctt ttgataaaac aactaaggga gttctatttt tttgacatca gataaaaata 360

ctttttcacc tttcccgttt gtg 383

<210> 6166

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F5

<400> 6166

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tctctgggtg actaaacctt tggggaacac caagtaagag gaagcaaaga aaacgagact 120

tggtgatgcc tccacttggt gatgatggcc ttctggaggt tgtgggtttc aaagatgctt 180

ggcatggcct tgtcttgcta tctccaaaag gccatggaac tcgccttgct caggctcacc 240

gtgtccgatt cgagttcctc agaggcgcaa ctgatcatgc ttacatgaga atggatgggg 300

aaccctggaa gcagcctctt cccacggatg atggcaaagt cgtggtagag atctcccatg 360

ctgggcaggt gaagatgctc gcgaacaaag actgcat 397

<210> 6167

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F7

<400> 6167

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gacaagcctg gaggttgcac tctagctcat gccccaggta cagggaaaac atttatgctt 120
ataagcttca ttcagagctt catggcaagg tatccatctg caaggcctct tgttggtgctg 180
cccaaaggga ttctaggtat atggaagaca gaaattaaac gatggcaagt gcaggatata 240
ccagtgtacg atttttactc tgtcaaggct gaaaaaagag tagaacagtt gcaaatcctc 300
aaatcttggg aagacaagat gagtatacta tttcttggat acaagcagtt ctccacaatc 360
gtcactgatg atgggggagc caatgtcaca gctgcatgct gagacaggct g 411

<210> 6168
<211> 442
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-F9
<400> 6168

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agatcaagag agagaaagat aagtagagat ggtggggctg cagtacgac tcgtcgggaa 120
tccattgggc gcggtgcgcg ccaccttcga gaggacgggc gccgccgctg ctgcggagtc 180
tggaggagcc gacctgtgg cggcgttccg tggcaaagac tggggcgccg gcgacctctt 240
ccgctccttc ctcttcgagc aagacggctt tggcaagggt ccggtgttgg attcgtcaaa 300
tcttggattg atcaaaccga acacctgggt ccggtatcgg ggaatgggtc aggatatgct 360
tgggaatgag tactacattg gtgctttcaa ggatgggtca acttggagga caaacaagta 420
gcctgacttc tcaccgtact ca 442

<210> 6169
<211> 347
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-G10
<400> 6169

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gtcgcaaccc tcccagctg tcatcatctt ctgcagggtg aaccagatcg atttcgagga 120

ggtcacgggtg gatctgttca agtctcagca cctcacaccc gaattcaaaa aaataaaccc 180
aatgggacag gtacctgcaa ttgttgatgg aagattcaaa ctatttgaaa gtcatgcat 240
tttgaggtat cttgcacggg ttttccttgg agtagctgac cactggatc cttctgactt 300
gttcaccaga gccaaaattg agtcaatctt ggattggcat cactcaa 347

<210> 6170
<211> 407
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-G11
<400> 6170

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gggttaactt caatgccgga aataaattgg gatttgaac caccggttgg ggataggaag 120
ataagcagca gttacatcac ctgcgttata ggcaacagga tcaaggcttc ggctcgtcag 180
atcttgggtga tgcccaactg tgaaagcttt cctatttctt ggatgatagc agatacggat 240
gactgggtgc cccgcagaat tgcacctttt atatggctga accgtgagcc cgctgagagg 300
cgtgctgcag acacaactag agagatgatg ccaggggaag cttccacatc caaggccatt 360
gcaaagaaca agtcgagtcc gctgccgtct tcaaaaagaa tcaccaa 407

<210> 6171
<211> 256
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-G12
<400> 6171

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tccgcgtccg gaacggcagc ctcaattcaa tgcgcctgcg ccgcgtgttc gacatcttcg 120
actgcattgg ctacggcgag atcaccctcg acgatatggc ctccgcgctc tacgcgctct 180
gcctcggcgc cgtatgctcc ggtctggagg cctctgttgg cgggtacatc ccggccggct 240
ccgccgggct ccactt 256

<210> 6172
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-G2

 <400> 6172

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 gctgccaggt tggctttggc gagcaacgac gacgacgacg gcgctcagga ctcagggtgct 120
 ttcggttcag gcggaggagg gcatggagcg cggcgactgc cagttcacgg tggtgccgcc 180
 gcggcagtac gacgaggccc agttcatgca ccagctgatg gtggccggcg accagcagga 240
 ccccgcgggc gcggggcggg gagctgccgc cgccggcggg gagaggaagc ggcggttcac 300
 ggaggagcag gtgcggtcgc tggagacgac gttccacgcg cggcgcgcca agctggagcc 360
 ccgggagaag gcggagctgg ctccggagct tggcctgcag ccgc 404

<210> 6173
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-G4

 <400> 6173

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 ataaaccaga ataacatttg gtacaaaaat ggggtcaaag gtaaggtatc cctaaaaatt 120
 tggtaagggt tatgtaaaaa agataagggt ttgtcactag catctgtttc caatggacaa 180
 atgttctaga ttctaaaagg tcaacaaaaa aatattttta gattttttga taaatttagt 240
 tataccaatt tgatggacca ttctaccttt cacagcttcc atctgtaaac tataagaatc 300
 ttctacaaga actagttcag aaggaaggct ttcccttgcc tatctataat acagcctcgg 360
 atgtctcgaa ctattctgct gccttcgtat caactgtgga aatccatggt gtaact 416

<210> 6174
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-G5

<400> 6174

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ccatctgtgg agctggagtg gtgaagggct tccagcaggg gctttacatg ggcaacggcg 120
gtggcgccaa tgttgtcgcc cccgggtaca ccaaggggga tggccttggc gctgagattg 180
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gggactccca tgtccccatc cttgccccac tgccaattgg gttcgcggtg ttcctggtcc 300
accttgccac catccccatc accggcaccg gcatcaacct ggctaggagc cttggcgccg 360
ccatcatcta caaccgggat catgcctgga gcgaccattg gatcttctgg gtcggccctt 420
tcatcggcgc cgc 433

<210> 6175

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F1

<400> 6175

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gaagacactc actggcaaga caatcaccct tgaggtggag tcttcggata ccattgacaa 120
tgtcaaggcc aagatccagg acaaggaggg catccccacc gaccagcagc gcctcatctt 180
cgccggcaag cagctggagg atggccgcac cctggcggtat tacaacatcc agaaggagag 240
cactctccac ctggtgctcc gcctcaaggg tggcatgcac atttttgtga agacattgac 300
tggcaagacc atcaccttgg aggtggagag ctctgacacc attgacaatg tgaaggccaa 360
gatccaggac aaggaaggca ttcccc 387

<210> 6176

<211> 248

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D12

<400> 6176

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cctgatactg ctatgcataa tgttggtgct gtaatgcat ctccatatga gatggtaggg 120
atgggtcatca cagattctgg cgtcgcacaa cactgttcca attggggcac taaccactgc 180
gcttgctaata acctcaccag attatcacag attgatgcat ggtgacaatc tgtatcctct 240
tgttgaac 248

<210> 6177
<211> 405
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-D2
<400> 6177

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gcctccaaca tggcgatctc ctccacggcg atggccggca ccccatcaa ggtgggctcc 120
ttcggcgagg gccgcatac catgcgcaag accgtgggca agcccaaggt ggcggcgctcc 180
ggcagcccct ggtacggccc cgaccggctc aagtacctcg gccccttctc cggcgagccc 240
ccgagctacc tcaccggcga gttccccggc gactacggct gggacaccgc cgggctgtcc 300
gccgaccccg agaccttcgc caagaaccgc gagctggagg tgatccactc ccgctggggc 360
atgctcggcg cgctcggctg cgttctcccc gagctgctct cccgc 405

<210> 6178
<211> 447
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-D4
<400> 6178

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ctaacaaaaa gggaaccaac ccggaatac aattccccctc ccaaccgtta gaactcccaa 120
attaaaaaaa acgaagggcc cgccggtccg gcttccccctc ctggcccgtt caacaaaaaa 180
atttccggga gtcctccaac tccaagcaag ggttccgatg gcgctgcaat ggatgatcct 240
ggcgtgcgtg gtggcggtgg aagctgcggt ggctgcgctg gtcacgctcc cggtgccccg 300
cgctgtgcgg ggccagatcg tcgcgctcac gtccttgttc ctgcagcccc tgtccagtgt 360

gatacccttc gccgccttcc agatcctcga tctctactgg aagaaggagc acagactgat 420
gtgcacctcg gagattttgc acgccga 447

<210> 6179
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D5

<400> 6179

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gccacggcgt gccgcagag accatggcgc gcgcgacgga ggcgagcgc gcgttcttcg 120
cgctgccggc agagcggaag gccgccgtgc ggaggaacga ggcgagaccg ctcgggtact 180
acgagtcgga gcacaccaag aacgtgaggg actggaagga ggtgtacgag ctcgtgctgc 240
gcgagccgcc gccgccggct gccgtggccg acggcgagct cgtgttcgag aacaagtggc 300
cccaggatct gccgggcttc agagaggcgc tggaggagta cgccaaagcg atggaagagc 360
tggcgttcaa gctgctggaa 380

<210> 6180
<211> 260
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D6

<400> 6180

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tccataccgt agttaactat cttcacattg ttttctgttt tttttggggt attgtatcaa 120
tcttaccttg actgcatcat ctatggcact gcatgatgat gccatctttt gcttgtgttg 180
aaacacgtag cctatccaag acaatgtggg tcctatacat ctgtagccaa ttttggccac 240
tagcatgcca ttggacactg 260

<210> 6181
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D8

<400> 6181

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ggcgcgagtg ctggagctcg ccaacttcat gagggccgtg gggagggcgc cctccaccaa 120
gcgctccttc ttctgaaccc accggcctct tcttcaccag ttctctgtc ttgccgccgc 180
cgctgtgca gttcagttca gttcagttgt cctgtgggtc ggaccgttca ccgcttcact 240
ccacgggatc aggcacagtg atcagtgccg tgctagctgt gtggaacgct tgttttagtg 300
ttgtatccac atgtacgatt tgtaacgttt ccttgcttct cccgtttcgt gttttcgtat 360
ggtatctatg gtattgcaaa gtccatggcc acgatagaca g 401

<210> 6182

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D9

<400> 6182

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ccggtgcgcc cgcgaccctt gctcccgtcg tcagggtggc ggcgccgcgc ggcgtcgctt 120
cgccggccgc tggcgccgcg tgcagggccg cgggcaagg gaaggagtg ctcagtgggg 180
tcgtgttcca gcccttcgag gagatcaagg gggagctcgc cctcgtgcc cagtcccctg 240
acaagtgcgt cgcgcgccac aagttcgtcg atgactgcga ggccgccctc aacgagcaga 300
tcaacgtgga gtacaacgcc tcgtatgcat accactccct cttcgcctac ttcgaccgcg 360
acaacgtggc tctcaaagga tttgccaagt tcttcaagga atccag 406

<210> 6183

<211> 198

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-E1

<400> 6183

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ctatttggat gtagcaacgt taccaccagc tgtatacgt ttttaatcga caacatttga 120
 ataatatgta cataacatta tgttgtgctc tgttctctgt ctgtttgatg tgcttatggg 180
 ttttgatctg tagcttac 198

<210> 6184
 <211> 395
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-011-Q1-E1-E10
 <400> 6184

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 ggaaadaggat aaggagagcg atgctggcga caagctggct ccgacagggtg gcgacctcgt 120
 gctgtacagg cggattgctg aagtaaaaga gaaggaacgg agaaggactt tggaggagat 180
 actctatgct ctgggtgttc agaagttcgt tgaagctggt gtctctctgg ttccagcact 240
 ctcacgctcc accgatcctt ctggaagagt tgatcagtgg gcagaaactg tggaagaaaa 300
 gcttcaacgt ctgcactcgc atgaggccta tgaaatgatc gagaatcacc tcaccctcat 360
 tctggggcag cgtcaagggtg acgccactat cgag 395

<210> 6185
 <211> 357
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-011-Q1-E1-E11
 <400> 6185

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 gtgccccgcg agcagcgctt catgttcgag ggagacgagc tctgcggccc cgacatatgg 180
 aatacaacct ggtatcctaa ggctgcagat catgtaacta ccgagaagac atggtatggt 240
 gttgatgcaa cagacaagat cctaggcagg ctagcatcca ccattgcagt acatatcagg 300
 ggaaagaatg aaccactta cactcccagt gttgacatgg gaacctttgg taatggg 357

<210> 6186
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-E2

 <400> 6186

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 ctgtcgccta cttgcaacag cagttgcttg catccaaccc acttgctctg gcaaacatag 120
 ttgcatacca acaacaacaa caattgcaac agtttctacc agcgctcagt caactagcca 180
 tgggtgaaccc tgccgcctac ctacaacagc aacaactgat ttcacttagc cctctcgctg 240
 tggttaatgc acctacatac ctgcaacaac agttgctgca acagattgta ccagctctga 300
 ctcagctagc tgtggcaaac cctgctgcct acttgcaaca gctgcttcca ttcaaccaac 360
 tgactgtgtc gaaatctgct gcgtacct 388

<210> 6187
 <211> 318
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-E4

 <400> 6187

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 gccccaaaaa agggggccatc ccaaattcaa taactttact ttaaaaaaaaa gtggaaaaaaa 120
 ccaagggcgc gaaaatgaaa aaaccctttt attttttaaa taaaaaaggc accacaagga 180
 atctacccca aatacaattt cccggtttta aattaaaatt ctaattaaca aggataaaat 240
 taacaagtta ttcaagttgg tcaataaact gcaaaattca ggcatatcac ccagacatt 300
 actctacaat acagtact 318

<210> 6188
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-E6

 <400> 6188

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 gaatatgcag aaccatggga ctatagccat gattatcctg ttactctccc actaaggaag 120
 ccctactctg gaaatcctga aattctggat gaggaagaat ttggagaatc ttctgccagc 180
 aggacccaag atgatgaatt atctgcagca gagcagcttg gattaatgga tatgtcgtcg 240
 gaatcacagt tcctcttctt ccagttgcc a tcctctcttc ctttaccgag gcagccacaa 300
 tcaggtgctg accctaacga agtccgcgat gagaaacgtg aggacatgag gccatcatcg 360
 cacaatggct cgaaactcaa agaagttcct gaaggctata tggggaaaat gctccgtata 420
 ta 422

<210> 6189
 <211> 348
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D11

<400> 6189

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 tgccctgccc ctgcgcgggg ctgcagggt tgtacggcg tggcgccggc ctgacgacga 120
 tgatgggcgc cggcgggctg taccctacg cggagtacct gaggcagccg cagtgcagcc 180
 cgctggcggc ggcgcctac tacgccgggt gtgggcagcc gagcgccatg ttccagccgc 240
 tccggcaaca gtgctgccag cagcagatga ggatgatgga cgtgcagtcc gtcgcgcagc 300
 agctgcagat gatgatgcag cttgagcgtg ccgctgccgc cagcagca 348

<210> 6190
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-E8

<400> 6190

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 gtatgtcttc attggtgcc cacagattgt ggtctacgc actctctgat tcgatagggg 120
 caaagtgctt caagggcata tggaactact gagatgcagt ttcactgttc tgctgtgga 180

tatccatcgg agatgtttgg ttttgtgaaa gaagtatttc gaacatgtgc acaacactgg 240
 aggatagaca tgctgggttag agagttacag tatgtataaa gatttttttc tgcaagtgaa 300
 gatgtaatgg gcaatacggg cccgggacttc gtgaatcaga tgctacttaa gtcagaaaac 360
 aaagcctatc atgctg 376

<210> 6191
 <211> 304
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B7

<400> 6191

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 gtttgctgct accataaaga agtggaggcc acctgagcca tacaagggaagggtatcag 120
 atatatggat gaagtgtgcc gaaggaagga aggaaaagcc gggaagaaga aatagaaagt 180
 gtttttttgc cctctcctta cttcatttca attttccac tgtaatgggtc ttcgtctgct 240
 aaggctgaac ctaagaaata tattgttctg tgctgaacgt ggcatataga tgtacacttt 300
 gagc 304

<210> 6192
 <211> 386
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B8

<400> 6192

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 ccagcggcgt gatctccatg accgtcagct cgctgtccaa ggccatcacc atcggcggcg 180
 cttcttctcc ctacgcgggc gtcacgggtg tcgctgggt gttcttcttc accttcgtcc 240
 cggagaccgg cggcgggacg ctggaggcga tgagcaagct gtccggcgcc atcgacgacg 300
 agctgaaacc ccaggacggg gccacgacag acaagcataa gctcgaactg gccgcctacg 360
 gcaccatcta acttcacatt attaga 386

<400> 6195

aaccaangct ccggaattaa ctaaaaagtg ctgttgtaa caatgaaagt aacaatgttg 60

ttggtgttta aaggggaaaa aagtccatcc aaagatttta ttagctcaag gcaaaacctt 120

taaaactggc ctgctgctgt ttggtggtga tgaaaacaca aaaatggaag ctgacaagcc 180

agtgaatagc tgtgtattgg tctggcaagg tagtgtggca aagcccacct tccacagacc 240

acaggttcac tgtacataat tgccggagtg aggctgcagc taagaagggtt ttcgttgatg 300

cttctgttcc tcaactactgg gaccttgctg tcaatttctc agaagattct tctgagcaa 360

agtgttcaga accttggttag cgtctgctga cctttgctgg ctacatgct 409

<210> 6196

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C2

<400> 6196

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cttaccttta tggtctcgct acaaggaaaa acatgagatt tcaagtttca tatggccgta 120

acagtgatca gcagcaccca aactacaaa tggtttctga tcttctgaat tcagcaaacac 180

ttgccctaga aagagttggt gaagaaaaat atatgctttt aaacaagatc cgtgacttaa 240

atgagttgtc cagaaaggag gttgatgaga taataaaagt gtgcatgaag caagattgca 300

tatctcctaa cgataacatc cgtaaaagga ggtacattgc aatgatagat ttgtgttgca 360

tggctggcaa ccgagaccaa ctcatcacc ttctactcca aataacggga tgtgccgtta 420

<210> 6197

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C4

<400> 6197

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aataagtgat cctgcaaaac ttaactcaaa ccaacacaaa cttgggctaa aatgtgagtt 120

agaggggaatt agaaccaagt ttgagagtag agagaagaga gaagttcctt tcacttgatt 180
gctccatcaa gatttaattt agatttagag caatatcaca agtgaagaat tggaacaaag 240
aagagataaa gattgcaata atgtaaatgg cacaagagac atgacaattt tattccgtgg 300
ttcgggtcaag cataatatgc ttgcctactc acgttggtgc gtcccaatga acgaggggtg 360
cactcaacct ctctcaagtg atccaaagac caaacttgag tatcttagtt cctcctaagg 420
ttttaaaata tccccgattg tgagga 446

<210> 6198

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C5

<400> 6198

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tatactcatt ctacgcaaca gagttgccac aactgcggac atggaatctg cgataactgc 120
gagcatgacg gtcaagacag tcttcgtgtt tcctctgcta ggggaaacaa tgaattggag 180
actcgactga ttgcgtacgg caaggacgac aaaacagcca tgcctccaag tgctctgttt 240
ctgcaagagg agaaagccta caccctgcc aattccagctg gcataacgga ggaggataat 300
atactgcaga aaagctatat ccatccattt gtttgatcgg aagaaacggc cgcatttagt 360
atgctgcca tgtgaggaga gcctggccta aact 394

<210> 6199

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C6

<400> 6199

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gtgaagaatg gtgcaattgt tgtttgccgc attcaggtga ataacttgat atgcatagag 120
aagttctctg atttcccaca gcttggaagg ttacactta gaactgaagg gaagacggta 180
gccgtaggca aggttggtga tgttccgcct gctggcagcc caacattctg agcttaagcc 240

aattttgaac aggatggata atcatgaagc agtgcgttgt cttgagatac ttttctttgg 300
gagaagtgag attagttgag cataggtttt ttccgagccc ggcttgagaa tggcttatgc 360
cttaatgggtt taagcaacaa gcctgttttag attggttcca taaatg 406

<210> 6200

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C7

<400> 6200

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acaccaagtc gaggagctcg agagggcacc aataatggcc ggctggaact ccagcgtcgt 120
cgggctcaag cccgccgcgg cagtgccgca ggccgccgcc gcctcatcgc cggcgaagcg 180
ggtgcagctg gccgcgcccc agggccgccg cgccgctctg ctgggcttg cggccgtctt 240
cgccgtcacg gccaccaccg ggtcggccaa ggccacgac ttcatgagt acctcgagaa 300
gagcaaggcc aacaaggagc tgaacgacaa gaagaggctg gccaccagt gagccaactt 360
tgcgcgcgcc 370

<210> 6201

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C9

<400> 6201

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gtgtagttta ttatTTTTTg tgtatgacca aagcaatagc aaacctaaat ggtccaattg 120
atgttctgtt ttttggtgca tgcacactac tgtataactt tagggcctgt ttgtttcagc 180
ttatagatta tataatctga attataatct aaattatata atccagatta taatctagat 240
atattataat atatatgtag ttgtttggta gtttagatta tacaaatgta gattattcac 300
aaagacaaca atacccttat tgcttattta aggtgagaaa aaaaggatgt catatattgt 360
aatttctatt tacattacca tgggtagtag gtcttttgcc aaaataatct caaataagct 420

<210> 6202
 <211> 375
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-B5

 <400> 6202

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 gccagggcgg cgacttcacc cgcggaacg gcaccggcgg cgagtccatc tacggcgaga 120
 agttccccga cgagaagttc gtgcgcaagc acaccgcccc cgggtgtgctc tccatggcca 180
 acgccgggccc caacaccaac gggtcccagt tttcatctg caccgtcgcg accccttggc 240
 tcgacggcaa gcacgtcgtc ttcgccagg tcgtcgagg catggacgtc gtcaaggcca 300
 tcgagaaggt gggcaccgc aacgggtcca cctccaaggt ggtcaaggtc gctgactgcg 360
 gacagctctc ctaga 375

<210> 6203
 <211> 210
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-H8

 <400> 6203

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 attcttcaag gcctttcgct ggtccagggt ctcatgcatg gtacatggct gcactactga 120
 gcgcttttga tcgcacgggt cacattgcac aactgtgctt agtttttctg cctctacttg 180
 tcgcgtcact tgtggctggt tctcgagttg 210

<210> 6204
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-A1

 <400> 6204

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caccatgagc gcgctggagg aggtgtaccg catctcccgc gcgcagaccc tcatcgcgct 120
 ctgcggcaca gtccccgggt actggttcac cgtcgcgctc atcgacgtcg tcggccgctt 180
 cgccatacag ctgctggggt tcttcatgat gaccgtcttc atgctcggcc tcgccatccc 240
 ctaccaccac tggaccacgc cgggcaacca catcggcttc gtcgtcatgt acgccttcac 300
 cttcttcttc gccaaacttcg ggcccaacag caccaccttc atcgtgcccg ccgagatctt 360
 cccggcgcgc ctgcgctcca actg 384

<210> 6205

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-A11

<400> 6205

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 agaagtattc aacatcgga tcttcttccc atcataactg catgctcgag tatagataca 120
 acgggaaatt cttttaaggc ttttaatttat gagcttatgc ctaatgggaa cttggataaa 180
 tggatacatc acaaagacaa tgaggcactt ccaaagcgtc taagcttagc tcaaagaatt 240
 gcagttgtcg tcaatgtagc tgatgcattg gattatttac accacgactg tggaaggccc 300
 accatccatt gtgacttgaa gccaaagcaac atccttctcg gtgacgatat gaatgctgtc 360
 ttggcagatt ttggcattgc acatctttat tctgattctc agtcaacttg gaaaagttca 420
 ttt 423

<210> 6206

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-A4

<400> 6206

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 gatcccgcgc cgggtgcgcc tcatacttcc tcgtcactgc cttcgtttct ctttccaaca 120
 atcaagatga gccgtggcgg tagcgcgggt ggtggtcaaa gttctctggg ttacctcttt 180

<400> 6209

cccacgcgtc cgcccacgcg tccgcccacg cgtccgccc cgcgtccgat tcagaaacac 60

accaagcgaa gcacattagc aacaacctaa caacaatggc taccaagata ttatccctcc 120

ttgcgcttct tgcgcttttt gcgagcgcaa caaatgcgtt cattattcca caatgctcac 180

ttgctccaag ttccattatt acacagttcc tcccaccagt tacttcaatg ggcttcgaac 240

accagctgt gcaagcctat aggctacaac aagcaattgc ggcgagcgtc ttacaacaac 300

caatttccca gttgcaacaa caatccttgg cacatctaac aatacaaacc atcgcaacgc 360

aacagcaaca acaattccta ccagcac 387

<210> 6210

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-A8

<400> 6210

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cggagatgtc ttcagctttg gagtcacgct ccttgagatg ttcacagga aggccccac 120

cgacgccatg tttgaggacg gattgacctt acagggcttc gtggagatag cgtttccaga 180

gaagctgatg gacatcgttg atccagtact gctgtccact gatgagaggt tcgcaagaaa 240

gccgcgacac agaagcgttg gaggggaaga gattgagaac gccatagctt ctgtcactaa 300

gctcgcgctg tcttgcacca agctaacacc atcagagaga aagcccatgg gtgatgccgc 360

agccgagatg cgcattgataa gggactgcta tctcgc 396

<210> 6211

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B10

<400> 6211

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tttcggaatg ctaataaaat acctttttga gaaattttcca aattggcaag agattggtag 180
ccaggccatt ggagaccttc agatttttcta taaagcatcc aagcatagat ttgacaatga 240
tccagaatth aaagcaaggg ctcaacaagg agttgttcgg ctacagggag gagaagagag 300
atatcgagaa gcatggaaaa agattttgtga cattagcagg agtgaatttg acttggtcta 360
caaacgccta aatgtggtgc ttgaagaaaa gggggagagt ttctataatc cttatatattcc 420
tcaag 425

<210> 6212

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B11

<400> 6212

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cacaattgca ctgacaacgg cctccgcaaa ttcccgaagg ccaggcaccg cctcgacgac 180
aagctccccg actcgtggaa gcgcccggcc gagcaccgca ccttccaccg ggactgcatc 240
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aagtcagggc ttgagcgtgg ggagcaacag ccaccagctg acgtggccac cgctgccggc 360
acgtctgatg ccgtggagca gcagcaactt gaagataacg a 401

<210> 6213

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B3

<400> 6213

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tcctccaata actcaaattc ggtaaaaccg gaaaccaatt acggaaggat aaaaaccgga 120
acccggcaac ccaaaagaag gccggcgccg ggaataacaa ccctggccgc aacccccctga 180
ttctccccgt gaacaaaaac aagtttcaac ctccccttgt ggctggggagt ccgcgccgca 240

ttcaagttcc ccacgcacaa ggacgtcagg aacttccagg tcctcaaaga gatgtacaac 300
gagtggccat tcttcaaggt caccctggac ctgctgg 337

<210> 6214
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B4

<400> 6214

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ggggaagaag atcctgggtca accccccgtt gggcaatgtc caagaaagtg catatactat 120
gtgacgcctt gccaacgcac tattttggag gatgttcttg ctagtgtgtt gatgggtgcct 180
tacgatcttg ctgaagcagc agttctggat tccctccttt caaaagcgaa gttcgagaat 240
aacagggtata agaagcccca aagaggagca aaatcatcct ccgattatgt tgattggatg 300
tgatctgatc ccgagacaca aagaggatgc cagattcagc cgaaggcagt tcggtagatt 360
tatgctgggtt tgccatttct ccttgggtcag ttgcccagata gtttataaaa tgggaata 417

<210> 6215
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H7

<400> 6215

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cctaaagttt ttgatggacg ttttttacta ttactaccg aagcggcttg gccaaagttct 120
ttttgtcgat gctccatttg tttttcaacc aatgtggcag gttgttaaac ctctattgaa 180
atcatatgcc tccctggtaa gattttgtga tgccgagact gtgaggaagg aataacttcaa 240
agaagaaaacc gtgcctcctg atttccgcga ttaggtgaca tgattatttc ttcagtaatt 300
gcaagtcagt tctacctctg cctttgtgta acgattgaaa ttctaaattg tgcagattat 360
tttttagt 367

<210> 6216

<211> 388
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-010-Q1-E1-G2

<400> 6216

cacgcgtcca gatggcctat agatcaaacg ctgcactgta gggagcgtga agccaccggc 60
gaatggaatc cctagccgcc acctccgtgt tcgcgccttc ccgcgtcgcc gtncgcggcg 120
cgcgggccct gggtangggc gggacgggtg taccaaccaa gcggacgagc agccggagcg 180
gaaccagcgg ggtgaaatgc tctgctgccg tgacgccgca ggcgagccca gtgattagca 240
ggagcgtgct ggcggcgaag ggcggcgagg aggacaagag gcggttcttc gaggcggcg 300
cgccgggggag cgggaagggg aacctgggtgc ccatgtggga gtgcatcgtg tcggaccatc 360
tcaaccccgt gctcgctac cgctgcct 388

<210> 6217
<211> 219
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G3

<400> 6217

cacgcgtcca atcaatctaa acatcaatcg taggatcgct aaggaccctc aagccagaga 60
gaatggagtc cctaaccgcc aacgccgtgg tcgctgccac gcgagtcgct ttccacgacg 120
gcagggccct ggatagggaa gagagcgtgg ttcgatccag acggtcgagc agccaaagag 180
caactagacg ggtcaattgc tctgctgccg taaaacctc 219

<210> 6218
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G9

<400> 6218

cccacgcgtc cgcccacgcg tccgagcagc tgaacaaaca tttgactgta tatcaagctg 60
ttcaaagaca agtagttcat gccgaggatg atgaagatcg attcgggtgga tctgatttac 120

ctgatgatgg taaccacttc tgggatgata taaggggtga tgtgttcact ataacgtatc 180
agaaggctga taacacagcg gagaaggggt ctgttggagg ttcagcttca gtgccaaaat 240
cttccaaatc agattcttgc agaactttgt ctgaaaaaca gtgtacttct cttcttgata 300
gtattttgca aggagagctt ccctgtgatt tagagaaatc aaaccaaacc tacaatatct 360
tatcactatt acatgtgttg gagggtttga atcagttatc acctcgtctg agactgcag 419

<210> 6219

<211> 290

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H12

<400> 6219

gacccaagcg tcaaccacg cgtccggtga tagcttatgt acctgacata ttctttcatt 60
ctaattttcc tcattcatct accaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg gaggaaaaga aaaaggaaaa 180
aagaaagaaa aaagagagaa ggaaagggca gaaaataaaa aaaagggaaa cagaaaataa 240
aagggggggg gggtcgaaaa ggaaaaaggt taaaggggaa aaccgggggg 290

<210> 6220

<211> 322

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H2

<400> 6220

caaacctccg gccaaagcctc cgaaaaaatg ccgaaaataa accaccacaa accgttaagt 60
ttccccaagg cttcaaggctc ccccgggggc tgatgactta ggaagatgga ctcatattgct 120
cgaaggctgg aagagaattt atgggatcaa aacatgatcg gaccttgga ctaaaagctc 180
cacccaagat aacggtaacc aaatacacia ggcggtgtc attggtgaca ccattgggga 240
tcctcacaag gacaggtctg gcccttcct caatatacctc atcaagctta gggcggttga 300
atcccttgct ttgccccct tc 322

<210> 6221
 <211> 159
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-H3

 <400> 6221

 cacgcgtcca gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagaa aaaagatcaa 60
 ggggatgagg acctaaagtc ttcagggttaa ggtgttcggt aatcttaaata gataagatca 120
 ttcgatcttg taaatgggca tttaaatttta agttcaggg 159

<210> 6222
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-H4

 <400> 6222

 gcgtccacag aatattaata atataaccac cgatgtgata tgccatggag aaaagagtgt 60
 catcaaggaa ggtcataaga gtttcccaag tgggcattct tcatggtctt tcgctggtct 120
 aagttttctt gcatggtact tggttggaact acttaaagct tttgatcgca agggtcacat 180
 tgcaaaactg tgcttagttt ttctgcctct acttgctcgc tcacttgtgg ctgtttctcg 240
 agttgatgat tactggcatc actggcaaga tgtctttgcc ggcggcatca taggtcttac 300
 agttgcttca ttctgttacc tgcagttctt tccatatccc ttgacaatg atgccctatg 360
 gccacacgca tacttccaac agctagctga gacacac 397

<210> 6223
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-H5

 <400> 6223

 cggacgcgtg ggcggacgcg tgggaggacg cgtgggcaaa gatttcaaat gttaagggaa 60
 tggatgtgga attgtggaca catgatgggc ttccttcagc acaactcctg aagctgatga 120
 gagatgtggt tgctggcctt gtgcatctgc atgacttggg aattattcat cgtgatttga 180

agcctcaaaa tgtcttaata agcgcaggag gacctattag agcaaagctt tctgatatgg 240
 gtatcagtaa gcacctgcaa gatgacatga cttctgttag ccatcatggg acaggatttg 300
 gaagctctgg ctggcgggca cctgaacagc ttcgtcatgg tcgtcaaact cgtgcaatgg 360
 atcttttttag tttgggctgc cttattttct attgtatcac taaaggcaag catccgttt 419

<210> 6224
 <211> 287
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H6

<400> 6224

cgggccgacc caagcgtcag gacttcttgg tgagagcgat atgagtgtcc cagggtcaatg 60
 ctcatcccag ccacaattta tcaccagcgt tgggaggagt aaccgctcca atggccccgg 120
 cactcctctt atcgaaagca tagatgttga tcaaattggt attccagaga aaaacagtgt 180
 gaagaactta ttcccatata taaggcctgg atttcccgtc ccaattgcat atattgatcc 240
 tggaaacttt gagacggatt tacaagctgg agcacagttc aaatatg 287

<210> 6225
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G10

<400> 6225

cccacgcgtc cggcctttta ttcccccccc ctctctctct aggtatgatt gggctgccaa 60
 gaagaccttg caatctgggt actttttgtg gtcaatgggt gcatatgggt ccggtctcct 120
 aattacatac gttgccttga accttatgga tggccatggc cagccgggtc tcctttacat 180
 cgtgcctttc acaatcggca ccttcttata actgggcatg aagagaggcg agctcagaaa 240
 cctgtggaca aaaggacagc ccgagagagt gtgcacgcac atgcacccat cccccaagga 300
 ttcgcctgtt gcggtcagct cgctgtcgta tacaaggcta acgaccttac ctgatgttgc 360
 ctggccccgg agaatgttgc tgatgaccaa aacaaagttt ccagggttaa tgaaggagtc 420
 tact 424

<210> 6226
 <211> 78
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-E6

 <400> 6226

 acccacaagt caaggcatgt caacgctact gtgacggtaa ttcctttgac acatattgta 60
 tgtgactgga ttgtctag 78

<210> 6227
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-F10

 <400> 6227

 cccacgcgtc cgccccacgcg tccgcaataa tgattgtaga tagatatgtt attattgcat 60
 tgcagttcat ctatatcgat cactccagtg cttttgtttc attgtatgct tgcagccttg 120
 cacttcaatt tttgcagtcc aaagttctat tctttacttg gatataattac tctcttaaaa 180
 catcaattca ttgttttgca ttcctttggt tatttgtaga tatgaacaag tcctttgttc 240
 tttaatgggt ttgattttgc tggcttgaac tctttagggt tttgaactaa tgataacatg 300
 tgtagacctg aaaattcgta gactattgta ctgaaccttc tgatgtttgt tcctttcttc 360
 atgtttaggt ttgctgatca atttttaagc aagaaatctg gtatgacgca tgaca 415

<210> 6228
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-F12

 <400> 6228

 agccccacgcg tccgccccacg cgtccgccga ggcggggatg acgagcccaa tgggtggccac 60
 cccggtccag ttccacacaa cgggccgcct cagcttctgc tccttttctt ttcccagcgc 120

atcagggagg cggcgattcg cggcgggtgag ggcgtccgcg gagacgatgg cgacggagaa 180
gctgggcatc aaggtggagc gcaacccgcc cgagtcccggt ctctccgagc tcggcgtccg 240
ccagtggccc aagtgggggt gcgagaagag caagttcccc tggacctact ccgccaagga 300
gacgtgctac ctgctgcagg ggaaggtgaa ggtgtacccc gaaggccacg gngaggagtt 360
cgtggagatc ggcgcgggag accttgctgt cttccccaag ggcatgagct gcacctggga 420
cg 422

<210> 6229
<211> 361
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-010-Q1-E1-F3

<400> 6229
acacaacagc tccgctcgtc gatcagctct cggctgacaa ctccatcgca attgggtgcc 60
tgccgacaag ttctcgccgc cgcaaccgcc gcggtaaaaa ggggaggag agggggaaaa 120
aactggccca gatcgaaagg tacagcacga aaaagagagg caagagagat aggggaccgg 180
agggcggcgg gccggggccc aagaccgagg ggctcgtgcg caggaagctg atgaggctcc 240
tgtcgtcgt cnccttcggc tgccgtgctg gacccatcga cgacgcgccg ccgcccgtgg 300
accacgccgc cgccgcgagg aggcgccgga ggaagagggc caacaaggcc gccagctgc 360
t 361

<210> 6230
<211> 326
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-E2

<400> 6230
cccacgcgtc cagtacaagg caattgaggg tttccttgct ggaaaaaacc caggacaaga 60
tctatttgac aagattgata catctaggct aaatgctcac ttgaaggatc taatgcctgg 120
gctcactgca aaagtgttcc gtacatataa tgcttcata acattggacg gaatcttgca 180
tgaagaaaca gaagatggaa ctgttttaga aaaaatcgct gtctatcagc gggcaaacaa 240

agaggttgcc atcatctgta accatcagcg tagtgtctcg aaatcacatg agtcccagat 300
gactagaatg aacgaaaaga ttgatg 326

<210> 6231
<211> 416
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-010-Q1-E1-G1

<400> 6231

gaccacgcg tcaaaatcca gatcagcaaa gcggcagtgc gtanagagga tcgtcgaaca 60
gaacagcatg aagatgggtca tcgttctcgt cgtgtgcctg gctctgtcag ctgccagcgc 120
ctctgcaatg cagatgccct gccctgcgc ggggtgcag ggcttgtagc gcgctggcgc 180
cggcctgacg acgatgatgg gcgccggcgg gctgtacccc tacgcggagt acctgaggca 240
gccgcagtgc agcccgtgg cgggggcgcc ctactacgcc ggggtgtgggc agccgagcgc 300
catgttccag ccgctccggc aacagtgtg ccagcagcag atgaggatga tggacgtgca 360
gtccgtcgcg cagcagctgc agatgatgat gcaccttgag cgtgccgctg ccgcca 416

<210> 6232
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-D11

<400> 6232

aggtggtgaa gcgactgaaa ggctgcagaa aggttacatg ccaacttctc ggtgttgttt 60
ttgaggagac aattcctgag gagcttcaga aacatgccac cgtagaccc tccgtggtag 120
agctgctact ggaaatatcc agatattgtg atctctacct aatggagact gtaattgacg 180
ataagagcga ggaaaatgct ctcattggccc tggagacctc tggacttttc agaactgggtg 240
gcctgatgaa agagaagggtg ctcttttgca gctctgaagt tggtcgaact tcatttggtc 300
cacaatttgg aacaaaattt caaaataaca acaaccttga caaaatttcc caaacaaccc 360
cggttaattc aatgcaaact 380

<210> 6233
 <211> 332
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-D2

 <400> 6233

 gggaaaaaaaa aaaaaaaaaa aaaaaaaaaa caaaaaaaaa aaaaaaaaaa aaacaaaaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aaacaaaaaaaa aggggggggcc ccccaaaagg ttcaagctta 120
 agtaccctt caatgaaaat taaaaccctt ccaaaatggc ccccaaattc aattccaagg 180
 ccctctgttt aaaaactcct aaacgggaaa acccttgggt taaccaactt aaaccctttt 240
 gaaaaaaacc ccctttcccc aaccgggcta aatacaaaaa aggcctaac cattcccctt 300
 tccaaaaatt tgcgcaacct taaatgccaa ag 332

<210> 6234
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-D5

 <400> 6234

 acccacacgt caggtcaaag ggaagcagca cctatattgg caagctaaga tcaaacttcc 60
 ttggaacata gttcactgtc tatgatgtc atccaccata tgatggagct gcggtctcaa 120
 agatcgctc tgcacgtgtg gttggtttga agcaggtctc ccctagagtt ccggctggaa 180
 attatcccgt ttcacatatt tcttacgagc tgaatgttct gggctccaga ggtccacgaa 240
 ggatgaactg tgttatggat tccatccctg cattaactgt taaggaatga gggaaaactc 300
 ctacacagac tgaatttcca cttagcagcc ttgactcttt cccatcattt ccattcttca 360
 catctaaatc agctcggata gacagttcaa cgtcgaaatc atccagtcag agggaagata 420
 ggttggtgct gaagaa 436

<210> 6235
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-D7

<400> 6235

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ctcgggtcaa accctaagca gggagttgat ttatccgctg cagccatgag taagttgcag 120
tctgagtctg tcaaggatgc catctcccag attggtgggg atgccaagga gaagaatagg 180
aagttcactg agactgtgga acttcagatt ggtctgaaga attatgatcc acagaaggac 240
aagcgtttca gtggctctgt taagttgccc catatccctc gtcccaagat gaaggtgtgc 300
atgcttggtg atgcccagca tgttgaggag gccgagaaga tgggacttga ctacatggat 360
gttgaggctc tcaagaaaat gaacaagaac aagaagcttg ttaagaggct tgcc 414

<210> 6236

<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-D9

<400> 6236

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gtgaggcagc gagtgggaga caaggggaaa tggggaaggg agcgcaaggg agcgatgcgg 120
cggcggcggg cggcgaggtg gaggagaaca tggcggcgtg gctggttgcc aagaacaccc 180
tcaagatcat gcccttcaag ctcccgcccg tcggccctta tgatgtccgc gtgcgcatga 240
aggcagtggg gatttgcggc agccatgtgc actacctaac ggagatgcgc atcgcgcac 299

<210> 6237

<211> 300

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-E1

<400> 6237

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acccccacga gtcctatggc cgccaccgcc atgattggga ttaccaacct acgttgccgc 120
cacgaccgcg tctctctcct tccccgggct acgtcgtcgg ccgcccggtc ctgtacgctg 180

cttcctcctc gatgccgcgc ccattcttct tgctgtctcc cttcctcctc cgtctctccg 240
tgccggggccc ggggtccgacc aacagcagca ctgaagcgca tccctgccgc cgacaccggc 300

<210> 6238
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-E12

<400> 6238

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tctctgccgc ccatggcgct ctctgtggag aagacctcgt ctggacggga gtacaaggtc 120
aaggatctct cgcaggcgga cttcggccgc ctcgagattg agctggccga ggctcgaaatg 180
cccgccctca tggcgtgccg cgccgagttc ggcccgtcca agcccttcgc cggcgctagg 240
atctcggggt ctctccacat gaccatccag accgccgtcc tcctcgagac cctcaccgcg 300
ctcggcgccg aggtccgctg gtgtctctgc aacatcttct ccacgcagga ccacgccgcc 360
gccgccatcg cgcgcgactc ggccgccgtg 390

<210> 6239
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-C7

<400> 6239

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gggtgttttg aacatcgttc atggcaccaa tgatgttgct aataatattt gtgatgatga 120
ggatattaag gctgtatctt ttgttggttc caatacagct ggtatgcata tttattctag 180
ggcatctgca gcaggcaagc gtgttcagtg caatatggga gcaaagaatc atgcaattat 240
ccttccccgat gctgatagag atgctacatt gaatgccctt attgctgctg gatttgggtgc 300
agcagggcaa aggtgcatgg cattgagcac tgctgttttt gttggcgggt cagaatcatg 360
ggaggatgaa ttagtcaaac gtgcaagtgg ccttgttggt agttcaagaa tggttaatga 420
tgc 423

<210> 6240
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-B12

 <400> 6240

 gacccacacg tccacgcttc atacttggtc tcttggttaa ctattgacaa tgtatcttgt 60
 tttttgttga aaagtttagt acttgagtgt caatcatacg tattcgcttg ctaaactatt 120
 gacaatgtat cttgttcttt gttgaaaagt ttagtacttg agtgtcaatc atatttcaga 180
 gtcattgtga tatactgagc ttggagggtt tggccattga tctgcagaag ttcaatacaa 240
 ttggaagaat aagttaaaaa aaacgtgggc caaagtaacc ttcagcagta atgtttgtgt 300
 ggcaaagtct cttccggaga attgtggtga tgcaaacctt gtaccactga atatactgtc 360
 aatctgctat cttttccgtg gcctctaact cttagagtgt gtttggtttg agttgaggaa 420
 ttacttcat 429

<210> 6241
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-B2

 <400> 6241

 aaatctgatt tcgcgtaaat ggactcatca tggtgacact ctaatgggtcc ttggaattgg 60
 gaattgggca atgttggaag ggctcaaagg aaaatgggaa tcaagaaaaa tgggtggaat 120
 tgtagcaaaa ctggtgaagt cttagaatt ataaagggga atctaaaatt aaaactaagg 180
 caaacgatga tacgaagaaa cagcaaagac aatttctcat gcaaattctt tcaacaaatt 240
 ttcattaaag ctttttcaat tacattcttt ggtgantggg gtgacaagag ccagattgct 300
 actattggct tggctgctga tgaaaaccat ttggtgttgt cctgngtggg atcatagcgc 360
 aagcactctg cactactgct gctgttcttg gtggaagag cct 403

<210> 6242
 <211> 138

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B3
 <400> 6242
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 tttctagaga atggcatgta ctccagtgct acctgtacat tgaccagaaa aaatgtggta 120
 tctagtggcc ttctgtgt 138

<210> 6243
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B6
 <400> 6243
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 gcttgatggt gttgaggggt ttatccaaaa ctgtggacta ggccctacaa cacttgggta 120
 tctccagaaa attcctgata ttgagagatt attaggacaa gttagatcca ctgttgggtt 180
 atcatctttg cttcaactgc cctttattgg agaaaaaata ataaagaaac ggattaaaac 240
 atttataatg cttatcaatg gcctccgcaa tggatttgac ttgctaaatg atttaciaag 300
 agcggaccat ggtatcttgg cgctttataa gattgtggat attccatcat tgagctatct 360
 tcctgagtta atccataagt ttgaagagag aatgcaaaat gagtttccat g 411

<210> 6244
 <211> 393
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C11
 <400> 6244
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 ttgcgattca atagctacta gggatgctgc catgcacacg ttcattgcca atcggcagag 180
 tcttttggca ccctgctgac gatacgacac catcccgaaa gctcagtatc ctgtacaaac 240

ttttcccgat atcattcgta atgaaccagg caggaggaca atcattcaca ggcaagcaaa 300
 ggcctcttga tgtgggtccca gccaaagatcg acgataggtc cccgatattc ctcggaagct 360
 acaacgacgt ggaggagatc atagcgttgt acg 393

<210> 6245
 <211> 426
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C3
 <400> 6245

accacacagcg tccgcgggga actttccagc ctgattgac ttgacttgcg tgcaaaccag 60
 ctaaagtctc ttcctacatc atttggaaat ctcacgagcc tcgccaatct tgacctgagc 120
 tcgaatctgt tgaaggctct tccctgattgt ttaggaaagt tgaaaaactt gagaagggtta 180
 attgctgaga cgaatgagct tgaggagcta cctatacta ttggatcgtg cacctctctc 240
 gtggagctta gactggattt taatcagctc aaagccctcc cagaagccat tgggaagttg 300
 gaaaacctgg aaatcctgac gttacactac aacagaatca aaggcctgcc tacaacaatt 360
 ggccatctta ccaggttgag ggagctggat gtcagtttca acgaagttga gactatacct 420
 gagaac 426

<210> 6246
 <211> 422
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C5
 <400> 6246

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 ttcatgctac gtcaatttga acttgctcgg tctgttcaat tgcggcctta taatgcaatt 120
 tcattctctg gtccaatcgc tgtttttggt tccgtattcc ttatttatcc actgggacaa 180
 tctggttggt tctttgcgcc gagttttggc gtagcagcta tatttcggtt catccttttc 240
 ttccaaggat ttcataattg gacgttgaac ccatttcata tgatgggagt tgccggagta 300
 ttaggcgcag ctctgctatg cgctatccac ggggctaccg tagaaaacac tctattcgaa 360

gatggcgatg gtgcaaatac cttccgtgct ttttaacccaa ctcaagctga agaaacttat 420
tc 422

<210> 6247
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-C6

<400> 6247

gaccacgag tccgtgtcaa ttaggtgggc tttggacttt tgctgctctc catggagctt 60
ttgcactaat aggtttcatg ctacgtcaat ttgaacttgc tcggtctgtt cagttgcggc 120
cttataatgc aatttcattc tctgggtccaa tcgctgtttt tgtttccgta ttccttatgt 180
atccactggg acaatctggt tggttctttg cgccgagttt tggcgtagca gcgagatttc 240
ggttcaccc tttcttccac ggatttcata attggacgtt gaaccattt catatgatgg 300
gagttgccgg agtattatgc gcagctctgc tatgcgctat ccacggggct accgtagaaa 360
acactctatt cgaagatggc gatgggtgcaa ataccttccg tgcttttaac ccaactca 418

<210> 6248
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A10

<400> 6248

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gctagctgag ctccgatcct cgctagctag ctaggatacc gccataccac aagtcttctt 120
cacaagttaa ggagtgcacg caacaagaga tctcgatggc ctctgccacc gtgctcaagt 180
ctccttcct tcccaagaag tccgaatggg gcgccaccag gcaggccgcc gcgcccaggc 240
cgcccaccgt ctccatgggc gtccgcgcct ccgcctacgc cgatgagctc gtgaagaccg 300
cgaaaacgat cgcgtcgccg gggcggggca tctggcgat ggacgagtcg aacgcgacgt 360
gcgggaagcg gctggcgtcc atcgggctgg agaacac 397

<210> 6249
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A12

<400> 6249

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 gtacgtggga gacagtaaga gggctatgga cgagtacaca tcagagatct tcatgggcgg 180
 caagagcacc atcgtgctgc acaacacctg cgaggactcg ctctctgccg cgcctatcat 240
 ccttgatctg gtgctcctgg ctgagctcat caccaggatc cagctaaaac ctgagggaac 300
 ggacaagtgc cactcctttc acccggtggc caccatccta agctacctca ccaaggcacc 360
 actggttccc cctggcacac cgggtggtgaa cgctctggca aagctagagg cgatgct 417

<210> 6250
 <211> 410
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-A2

<400> 6250

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 cccttccttc acggggcgcg cgcgtcgcg aatgggtcaac aagaggtcct tcaacgtgcg 120
 tggctccctc cgcaagggca ctggcaacgg cgccgtgggc gttgccgcca gcctcctgct 180
 ttgcggccgc cgccgcaatg gccaaagagt gctgctgggc gcaagccacn gcgggctcgt 240
 ctctgagccc agccagttca ccgtcaaagc cggcgacacc atcaccttca ngaacaacgc 300
 cggcttcccc cacaacgtcg tgttcgacga agacgaggtg ccgagcggcg tcgacgcctc 360
 caagatctcg cangaggagt acctcaacgc gccaaagcag acctactccg 410

<210> 6251
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A3

<400> 6251

ggcacgacgt acacccacac gtccggatgg agctaataa ttagccgtaa gtatacacia 60
tagtactcaa tctaagcaac tagaatcaac atcagattcg gctgaagata gcatggatga 120
tagagagcac gctgatgcta aaaggatgga aacgatattt cattttatga tcgcatcttt 180
gaagtctggg cgatcttctg ttctactgga cactattatt aggcttgtgt acccaattct 240
ctcactacag gaaacatcac ataaagattt atcattgctt gctaagtcag ctttcgagtt 300
gctgaaatgg aggattctac atcggccttt tcttgaaact gctattacgt ctattcttcc 360
tttagtcagt gacctaact ggcgaccag atctgcactg ttatcgatc tcaggacctt 420
tacctacag cacacattca tacttt 446

<210> 6252

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A4

<400> 6252

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gaaacggatt caacagcgca ttcggtttct ttaaaacagc tgaaaatagc atggatgaaa 120
aaaaatcaag ctgatgctaa aaggatggaa aacaatattt cattttatga tcgcatcttt 180
gaagtctggg cgatcttctg ttctactgga cactattatt aggcttgtgt acccaattct 240
ctcactacag gaaacatcaa ataaagattt atcaatgctt gctaagtcag ctttcgagtt 300
gctgaaatgg aggattcgac atcggccttt tcttgaaact gctattacgt ctattcttcc 360
tttagtcagt gacctaact ggcgaccag atctgca 397

<210> 6253

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A5

<400> 6253

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 gaacgtcgtc ggggggaggg gcgttcgctg cgggcagcga tccaaggcag ccgtcgacgg 120
 cgaagccata cgcgccgccg aagctgtcgc cccaggacct acccatcgac tatgcaggct 180
 tcctcgccgt cgccttcggc gtcctcggcg tcatgctccg ctacaagggtg tgctcgtgga 240
 tcgcaatcat cttctgcgtc cagtcgttgg caaacatgaa gaactttgag aacgatctga 300
 agcagctttc tatggccttc atgtttgctg ttatgggtct ggtgacgaac tattttggcc 360
 ccgctcgtcc aggcagtaca aagcgctaaa ctgcggaaga acatgtgcta cattcttc 418

<210> 6254
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-A7

 <400> 6254

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 cggggtgtgg tgggagttcg gcaaggacgg cgacaccac ctctcgacg acaacgccaa 120
 gtggctcggc tttggcggcc ggtaccagga cctcatcggc agtaagggcc tggagaccgt 180
 caccatgggc cgtgccgaaa tgaccacggc cgtcaactac ctggcgaaga agacgacgac 240
 gacactagca gaggcggcgg aggaggagga ggagctgctg ctgctgcagg cagcggctga 300
 ccccaaagcc gaggagaaga gcaacctggc gaagctagt atcatggtat gcgaggggct 360
 gcggttcttc accgtgtcnc gcaaggtana cganggggtc aagaagccgc a 411

<210> 6255
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-A9

 <400> 6255

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 catcggctgc gtcaccttcg ccactgcgga tgcgatgcag ttcaccatcg acggcactta 120
 tacgtcaagg agctgttcag tcgcacaatc atcgtcttcg aagtcgattc tcgtggcagc 180

tgtagtcgcg tcggcgctag gtacgatagt agcctttgtg gcggtgcaa tagccgtaag 240
 atttccagtg gagatgtgct gagcattata ttcccagggtg gaccatggct atcagtatct 300
 caggttctgt aacgaggagt atatagtcgt cgaacattag agcgtgggtt cgtgactacg 360
 ctagtctacg ttgtacctca ttttaagtaga ccttgctact gtgt 404

<210> 6256
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-B1

<400> 6256

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 gggtcacgga ggaaattcag gaaacaagat ttaacactgc aatatctgca atgatggagt 120
 ttctgaatgc tgcatacaag tgggaaaccc agccaaaatc tgttattgaa tcctttgttc 180
 tgctgctttc acccttcgcg ccacacttgg ctgaggagct ttggtttcgc ctcgacatc 240
 cacaatcatt ggcctatgaa cagtttccag aggcaaaaag tgagtacctg gaggaatcaa 300
 agcttgact cctgtgcaa atcaatggaa agaccagggg tacaatcctt gttgacaaaag 360
 cgtgctctga ggatgatgct tttcgaactg cagcctcgga tgagaaactc tccaaatattc 420
 ttgatggaaa aggcattcaag aagaaaattt 450

<210> 6257
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H8

<400> 6257

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 ctctggccat ggcagccatc gtcgtggcgc cgtgcacggc ccagaaactc cgcaggact 120
 acgtggaccc gcacaacgcg gcgcgcgcgc acgtgggcgt cgggcccgtg tcctgggacg 180
 acaccgtggc cgcgtacgcg cagagctacg cggcgcagcg ccagggcgac tgcaagctga 240
 tccactccgg cgggccttac ggcgagaacc tcttctgggg ctccgccggc gccgactggt 300

cggcgtccga cgccgtgggc tcctgggtgt ccgagaagca gtactacgac cagcacacca 360
acagctgcgc ggaggggcaa gtgtgcggcc actacacgca ggtgggtgtg cgcgactccc 420
acgcat 426

<210> 6258
<211> 429
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-009-Q1-E1-G5
<400> 6258

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ctcaggggtg gtatgcatat ctttgtgaag accctgactg gaaaaacat aaccctggag 120
gttgagagct cggacacat cgacaatgtg aaggcgaaga tccaggacaa ggagggcatc 180
ccccggacc agcagcgtct gatcttcgcc ggcaaacagc tggaggatgg ccgcacccta 240
gcagactaca acatccaaaa ggagagcacc ctccaccttg tgctccgtct ccgtgggtgg 300
cagtaagtca tgggtcgttt aagctgccga tgtgctgcg tegtctggtg ccctctccat 360
atggaggttg tcgaagtatc tgctgttcgt gtcagtgttg gtttaataat ggaccggttg 420
tgttgtgtg 429

<210> 6259
<211> 437
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-009-Q1-E1-G6
<400> 6259

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aatgaagtga aggaaccggt gcatttttat tttcgcaagg aaatcgatac tctcttaatg 120
ggaattgtaa gcttaaagct gtggctgtat caagagatga agggttcacg gatgccagat 180
tacataccta actgactttt tttgtggctg gtctccaaa ggtctcatct gtaattgtga 240
atccaagtga gttgagctca gctcttttga atactttggt aatccctgcc ctcttcatct 300
tcccactcca gttctgtttc atcagctcat catgatttat ttatcattcc tgtgattcat 360

tgacgatca ttatcaattt gtttctttat ttgcatggac attaactgtt acaaaatgcc 420
gccttcgccc tctgtg 437

<210> 6260
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H1

<400> 6260

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accgtcggcg gcgccccggc gggccggatc gtgatggagc tgtacgcaa cgaggcgccc 120
aagaccgchg agaacttccg cgcgctgtgc acgggcgaga agggcggtgg caagtccggg 180
aagccgctcc actacaaggc ctccaccttc caccgctca tccccgagtt catgtgccag 240
ggcggcgact tcacccgchg caacggcacc ggcggcgagt ccactacgg cgagaagttc 300
cccgcgaga agttcgtgch caagcacacc gccccgggtg tgctctccat ggccaacgcc 360
gggccaaca ccaacggctc ccagttcttc atctgcaccg tcgch 405

<210> 6261
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H10

<400> 6261

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ctcagcgatc gcggcgggcg atgcggatgc ggatggggaa ggggcccgcg tcgchgchg 120
ggtcgcggca ccggcagttc cgcgcccagc ccatgacccg cgtcgacgac ctccaggagg 180
tcttctcggg cctgcagtcg gcgchgagg actcacgctc cgcggacgcc gccgtcctcg 240
aggcgagct ccagcagatg ctgcgggagt ggcgctccga gctcagcgat tcctcccccg 300
cctcctccct gcagggaac gccagggaac tgtcggattc gccttccgat actcttcgct 360
tgctgcagtt ggtggtggcc gaggaggagg atgacgccac gagcaagatg gtcgagcagc 420
agcagcagca gccccca 437

<210> 6262
 <211> 415
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-H11

<400> 6262

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 ggtggaggca tcgccggagt ccggcgccgc ggcgaccgga ggtgcctcta gtacggcggc 120
 ggtgcggaag gggaagtcac gcaagggtcg cctctactac tcgtcagtgc tcaagtcccg 180
 cggttacaac ccaatctgcg ttgggatccc ccgctccatc cccaagtgc ctaactacgt 240
 ggtggatgaa cctaaggagg aggcgacggc gcaggggcat gacctcaggc gggtcaggta 300
 cgggtgcgcg gggtactcca tgttcgtgga caacaggac gccagggtg gtgagagcga 360
 gggcaagacg ttgttgccat attgcanggg cctcgagtta ttggtggaca gcaga 415

<210> 6263
 <211> 246
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H12

<400> 6263

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 acccccgggtt tccggctccc cggccacca aggtgccctt agtategccc gcgtgccaaa 120
 ggggaattca ttcacgggct gccctctact acccgtcagt gctcaagtc ccgcggttaca 180
 acccaatctg cgttgggata ctccagtcca tcccccaagt tectcactac ttggctggat 240
 gaaccc 246

<210> 6264
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H2

<400> 6264

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agcgaaagct cccctaacct tctccgcgca tccgatcgca aggaagaaga gggagatgag 120

ctactacggg cagcagcccc ccgtcggcgt cccgccgcag caaggctacc cgggcaagga 180

cggctaccgg ccagcggggg acccgccggc cggctacccc ccgccggggc agggctaccc 240

tccgcagggc taccgcgcgc agtacgcgca gccgcctcca cagcagcagc agagcagcgg 300

gccttccttc atggagggat gcttgggtgc cctctgtgc tgctgcctcc tggacgcctg 360

cttctgagag tgagaggggg cgaccgacgg attcgacacg gcgacaagtg aaactactag 420

ctttctatgc gagggagata gatagag 447

<210> 6265

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H3

<400> 6265

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aactttattg tcagtgcag gggtgcagct gcaagaatac gtggggaagc tatgaatgca 120

gctgtggtga tgacaatatg ctatacatga gagagcatga cacttgcac agcaaagagg 180

gaactgccac tactgttggc tggagcttcc tctgggttat tttcttttga cttgtttttg 240

ccgggggttg agcatagct gtgtacaaat acaggctgcg gagttacatg gattcagaga 300

tccgtgccat catggctcag tacatgcctc tggataacca agaaggagca aaccagcatc 360

aggctcgtgca cgccaatgat atctgaagct gcactccttt tctgaagcag aaataaaagg 420

ggcgtgcaac atttc 435

<210> 6266

<211> 427

<212> DNA

<213> Zea mays

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<400> 6266

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 tttctttgca aattctatatt acaattaaat atcacaagct taattgatta gttttgcatg 120
 tcgggacatc ttaaatacgaa taagttgttg tttgttact acaatgcgac cttgattttt 180
 acaggtgaga gcaagagctg cggacctcaa tttgtcacct acttctgata tcaacttatt 240
 ggagagccgt gatatccaca tacatthttcc tgctgggtgct gtgccaaagg atggcccttc 300
 tgcaggtgtg acattggtaa cggcactagt gtcgcttttt agtaacagaa aagtgagagc 360
 agatactgct atgactggcg agatgactct aaggggcctt gtattgccag ttggtggtgt 420
 taaagac 427

<210> 6267
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-H7
 <400> 6267

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 tcaccaattg agcactcatg ttccccaaga tggagtgttt attaggagat tcggctctga 180
 ggtgtcttct tcagagcaaa tgaaccttat taagcaactc agacaaagaa cgagtgtctc 240
 aatcaaagat gtcaaggcct ctctagttac ctgcaactgg gatattgagg ctgcacagaa 300
 ggacctaagg aagagaggtg ttgctcttgc tgccaaaaag tcttcacgca ctgctgctga 360
 aggtttgcta gctatcgac aagatgacaa aagggctgct gtagttgagc ttaactgtga 420
 aactgatttc 430

<210> 6268
 <211> 420
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-F1
 <400> 6268

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gaaggttgcc aaggctgtga agtctggggc agccaagaag aagaccaaga agatccgcac 180
gtctgtgaca tttcaccgcc ccacgaccct gaagaaggct agggacccca agtaccacg 240
aatcagcact accggaagga acaagcttga tcagtaccaa attctcaagt acccccttac 300
cacagaatca gcgatgaaga agattgaaga taacaacact ctggtcttca ttgttgacct 360
caaggcagac aagaagaaga taaggctgcc gtcaagaaga tgtatgacat ccaggcaaag 420

<210> 6269

<211> 271

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F11

<400> 6269

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cgtccgattg ggactaaatt aacaatatta agggtaattt gggaaacca ttttcccctg 120
ggattcctaa tttccaaagg aaaatgaact aattttcttg ggaaaatgaa attcccttgg 180
gaaaaatgtg gtttccaaac taacctaacc cttagagtta atttgtcaac tctatttttc 240
taaggaaatt cctctcataa ggcttggttt c 271

<210> 6270

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F12

<400> 6270

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ttgcaaactt atctgctgtt taaattgtag accatataag ttgctatcct atctgctgac 180
gaagtcggtc atgcattggg ctagcttcca tgttcatttt gatccttttc aagcatcatt 240
tgtaattctt aaagggtgaa cctatgctgt gattttttat ttcaaaagta tagtgatcta 300
ttagcagttt gatttcatgt gattcatctt tctaagtgtc ttgatagtga ttttctcgat 360

gaaataattg gttcatgatg tttttgggtca tatccaggta gctgctaatag gagat 415

<210> 6271
 <211> 327
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-F3
 <400> 6271

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 aaaaacaaga agatctcaaa aaggaaagaa aggtaacaaa aaaaaaaacg atcaaccttt 120
 ctctaaaaag gattggtaat gacatcaagg caacgtcagt gttcactgtg cacaatcatc 180
 gggaatactc tcgtatccag aaaacagggg atgaggattg cttctgaagg tctgaagcac 240
 agaatctttg aagtttgctt aactgatctt catggcgacg acgataaagc ttacacgaaa 300
 atcatgttcc atgctgaaga tgtgcaa 327

<210> 6272
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-F5
 <400> 6272

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 ccttgctatg gtactctgag tctctgacaa ccccttagga aatcacctta cacctacttg 120
 tgttgaaaaa aatgctaact atatataatt gatctaacat gcaactatca tatacctttt 180
 catgacatgt cacacctgtg acatagtaat tcatgttcgc gtactcgcct atacacattt 240
 ctcttttgtt tatgtcacat ttaagaacta aaaactttac tcatgtcaca ttcaaacaaa 300
 aacattgcaa ggaagaattia tgcaagtgtc atgttgcaaa aaaagggttat aaggaagtga 360
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 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F6

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aattttccct caatgctcac aagctcctat agcttccctt cttcccccat accttccatc 180
aatgatagct tcagtatgtg aaaaccacgc tcttcaaccc tataggctcc aacaagcaat 240
cgcagcaagc aacatacctt tatcaccctt gtttcaacaa tcgccagccc tatctttggt 300
gcagtcattg gtacaaacca tcagggcaca gcagctgcag caactcgtgc tacctgtgat 360
caaccaagta gctctggcaa acctttctcc ctactctcag caacaacaat ttcttccatt 420
caaccaactg tctacattga accgtgc 447

<210> 6274

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F7

<400> 6274

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ggttccacgg cctccggggc tacgccgcgc ccagggtccgc ggtggcagcg ctgccgtccg 180
tgaggggtggg caggaagagg tcgtcgtcgc agggcatccg ctgcgactac atcggtcccg 240
ccaccaacct gatcatggtg acgacgacga cgctgatgct gttcgcgggg cggttcgggc 300
tggcgccgtc cgcgaaccgc aaggcgacgg cggggctgaa gctggaggcg cgcgactccg 360
gcctgcagac gggtgacccc gccgggttca cctcgcgga cacgctggcc tgcggcgccg 420
tcggccacat cctc 434

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<211> 270

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F9

<400> 6275

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gaaatggcgc cggccttggt ctgtgatggc tccgaaattc tatgcgatgt ctgagaacaa 180
ccttcagtgt gtgttcctgg agctctcatg cacacagccc aacacgctgc ttgtcacgga 240
cctgggcata aatggtgtgc caacgttcaa 270

<210> 6276

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-G1

<400> 6276

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gctcccggga ctggctccgc cctcaggccg gtggcagtcg ccggcggcct ccgcggctac 180
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gagtacgatg ggcggcacgg cggccgggac tacgctgtgc ccagcctgtt ctcagatatt 300
ttccgtgatc cgcttagtgc gccgcacagc attggccgcc tgctgaacct tgtggacgac 360
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<210> 6277

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E8

<400> 6277

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ctgttgcata caagaatgtg attggggctc gccgcgcttc atggcgcatg gtttcttcca 240

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 gtggcaagat cgaggctgaa ctgagcaata tctgtgatgg aatcttgaag ctgcttgact 360
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<210> 6278
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-D5
 <400> 6278

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 ctgcgccatc cggcgccgcc accgcacccc gccaacggcg ccagcagcct gtggcgcggc 180
 ggtggcgccg cgctagctcc tcacctctgt cgcttcgctg ccaagaggag gacgctccgg 240
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 caccgctacc tcgacgtcag aacggagggc gagtttagcg cc 402

<210> 6279
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-E10
 <400> 6279

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 cggacttcgg ccgcctcgag attgagctgg ccgaggtcga aatgcccggc ctcatggcgt 180
 gccgcgccga gttcgggccc tcgaagccct tcgctggcgc taggatctcg gggctctctcc 240
 acatgaccat ccagaccgcc gtctctatcg agaccctcac cgcgctcggc gccgaggtcc 300
 gctggtgctc ctgcaacatc ttctccacgc aggaccacgc cgccgccgcc atcgcgcgcg 360

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402

<210> 6280

<211> 392

<212> DNA

<213> Zea mays

<223> unsure at all n locations

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<400> 6280

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ctaaaggaac caaacaggta agaccttgcc tctcagcacc ctgcacgtca taacactgaa 120

tatgaaggac agaatagcag tatagtggga aacagcaagc ctcacacctt ggtttaggaa 180

cttatttaag gattcgaggt tcttggtgca tgtactgacg gacagatcat ccacagtaac 240

tttaatacat tgatgtgctt gttcccaggc agaggaaggg catgtcgagc ttctgggcaa 300

tcttctgtat gctgcaaagg ttgtagcaga gcaggaaggg cttgctgatg gcttcagaat 360

tgtcatggac gatgggcccc gangatctca at 392

<210> 6281

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E2

<400> 6281

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agttgtcttc tgtgcattgt tttcttatcc caggtcaggt actggtctga atttaatcaa 180

atgagcatcg agctgttaga aaaccaaggc accaactcta atagattcac catctggaaa 240

gcgagggcag ttatcatgcc ttgtgaagat ggtttggttg gattgcgatt ccctttatgc 300

gtcctatttt ttttatgtgt catcttctgt tgtatcatcc tttctttcaa ctatagtttc 360

atgtggtaca tgatgccttt tgttaccttc gccacagtac tgctcacgaa tagca 415

<210> 6282

<211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E3

<400> 6282

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tcatgatggc caagtgagta aagcctgcgg taacgggtata gtaccccgcg ggaattgaag 240
gaggaaacca aaccgtgcat cgcattattag aaaggcagtg caggtcttgt ttccttcgtc 300
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cccttatctc catttgtgtc atcgaaactc cttgcttcac ctgctgtgtg aatctgtacg 420
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<210> 6283
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E5

<400> 6283

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taaatacaac ttgggtatcc accttgatgg ctcaacattt actagctgct gcagaccgtt 180
atgcattgga gagattgaag ttgctctgtg aacttaagct gtgtgaagat gttgcaataa 240
atacagtggc aaatactttg gcaactggctg aacagcacca ctgttatcag ctaaaaactg 300
tttgcttgaa atttgtagct ttgctgaaa atttgaaagc tgtcatgcaa accgatgggt 360
ttgattatth gcaacaaagc tgcccatccc tctgaccga gcttctcgag tatg 414
  
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<210> 6284
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E7

<400> 6284

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tgcggggcta cgggccagcg tcgccgtcgt cgtcgtcgtc gtcgggtggcg ctgcctcggc 180
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tggaggagga cgaggggctg tcggggaccg tgttcggccg aggggaggac catgaggtgt 360
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<210> 6285

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-C2

<400> 6285

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cgtgcccgtc gacgcgtcgt tcttgccggc cgcgccccac ctccgcctc tcctcctcca 180
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agcgcacctt taatctcgt tgcattgacc acagacgcac accggagcat ccggcgagga 360
gctgcacgct tgaaaccgac ga 382

<210> 6286

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-C5

<400> 6286

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6287 6288 415 DNA Zea mays

gatggtagcg atgaaaaaat gtgtgaaaac tgggagtgca attttgatga attgaaatgc 120
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accgctttgt tttttaaaaa catttttctt tgttatgatt tttgtaaata tgtacgt 417

<210> 6287
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-D12

<400> 6287

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agtcgcttac aaagaacgag ggcaaggaag gtgaagatgg tggttccacg gctggattgc 240
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tgcacttgca cgcagattcg cctggtgctg aact 394

<210> 6288
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A5

<400> 6288

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 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-B1
 <400> 6289

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<210> 6290
 <211> 414
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-B2
 <400> 6290

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ctcttctcct taaccgagac gagaagaagt cagtccatgt cggatctgaa tgat 414

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B3

<400> 6291

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taacattgaa aaaacattgc aaaaaggatt ccagacttgg ttcaaaacca atatcctaag 180

aatgaagaat ataaatcaag aagacgtga tgatgatcta ttttccttgg cttgtggtcc 240

tgatttcaga gttcgaaaat actcctcacg catagtgaat ggtgtgcggt ttaacactag 300

tgaccgtgac aagcatcgaa agacacaaaa tagtggagta atgacacaag gtactcataa 360

cggatcaagaa attgattttt ttttggaaacc ttaagagaga tcattcagtt agagcataac 420

cttgatgaga gatcagtagt tttgtttaaa tgtga 455

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<212> DNA

<213> Zea mays

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cgaatagatg acgcacaggg gaacggaacc taatgtcgtg gcctatacag ctctgatatc 360

aggtctagcc aacgaacgga gatcagaggc cgcattccaa ctgtatgatc atatgctgaa 420

agctggattg agtccacatg ac 442

<210> 6293
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B6

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taaacccta ccggcacgcg gcggccgtct ccccggtccc gtcgcccgtc ccgcaccgcg 180
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gtggggttcc tcaagagggc ggggaggacg ggaggaagga cacggacctc gccacgctcg 360
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agcggaaggc ctacatggag cga 443

<210> 6294
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B7

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cataatatta ttattagtag taattccgtc gtcaggccag cgttcgttgt tcacgcttgg 180
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aggggtgcagt cgctgtcgga gagcggcgcg gcgacga 397

<210> 6295
<211> 443
<212> DNA

<400> 6297

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aggacacccat aaaaaatgaa tgtgaaaaaa aaaattcatc aattttctcaa tacaaaaata 120
aacaaaaaat aggggggggc ccccttag 148

<210> 6298

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H2

<400> 6298

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aatctaattg aatcaaatat agactttctc tgccatctgc tgatcaagt accagcaggg 300
agagcaattt agaccttttt tttttgccga aatgactttt atgtagtagg ctcacatcaa 360
tttctagtta cttggtc 377

<210> 6299

<211> 329

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H4

<400> 6299

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ttcaaggcgt cggagccggg ggcgacgct 329

<210> 6300
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-H6

<400> 6300

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 tgggcgggcg cttctccagc aagttcatcc acgagtacca cgagaggacg aggcaggagc 180
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 acccgctcgt ggacgccgtc cacggcttct ccaacgccac gcgcateccg tccttcttca 360
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<210> 6301
 <211> 285
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-H8

<400> 6301

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 cgggttctaa gtattagggtc ggtgtgtacg cgtcttcttc gtgctcctac acgtcaccat 180
 gtctcaattc cagtggcggc cgttttattag ggtggcccct ggaacacccc tgggcgctgc 240
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<210> 6302
 <211> 443
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-009-Q1-E1-A10

 <400> 6302

gggccgacgc acgcgtccat gcaaaccaaa acaatgtgtg gtatcaccca tatctttcca 60
 aattgtggga aatggattgc atcaattaat ctatgagttt tactatatattg tgctctaact 120
 aaccgagcat ctttggttaa cttatattat gtagtacctc acctactcaa attatgtggt 180
 gacttgttgc acttgcagct caattaagaa cgttactgat ttctagggct acacttatgt 240
 ttcgttaact gctaaaaatg ttgctgattt cataagcaac attgggaaga actatgttgc 300
 cattatttca agtctagatt ctgggaagag gacggtaatt gatgcatcca gcggggaaag 360
 aggggccttt ccagccagat tcttctttga cgtgccgctg ggcacaccg cgacctccgt 420
 cgcatcgcca ctctcgetag etc 443

<210> 6303
 <211> 365
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-A11
 <400> 6303

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 tcccccgatc ttttacaaaa gcagtattct ttgaccaa tacaatttaa ttatccgggc 120
 atgaaaaatg caattgcaag gtctgagtaa ttaattaatt aattgtaacg gtcaaccttg 180
 ggcgttagta attgtcagtc gtctgtctg acgcagacag atagtaactc cttaccacta 240
 gctagcagat cgtttgga caagctgctt ttgtacgtgc tacttggtga ttctttgaat 300
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 aacca 365

<210> 6304
 <211> 304
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-008-Q1-E1-F4
 <400> 6304

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 ttacatgtgc ggggatatac gttgtaatag aatatttctg cgccccgtac gtggctgttt 120

gatgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagacggct 180
gcaaaggaat aagatttaag tatacgtgca attaaagtca aagtaatgtt acaacgagag 240
aagcaacaaa tttaaaataa cgtggagatc aatttacaac gatcgcaaaa gcaaaaaactg 300
taac 304

<210> 6305
<211> 371
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-F5
<400> 6305

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gtcgtggtgc cagggcctgg acggcctggc gtcccgcgag gccgcctact accagcaggg 180
cgcgcggttc gccaaagtggc gcaccgtcgt cagcatccct aacggcccct ccgagctcgc 240
cgtcaaggag gccgcgtggg ggctcgcacg ctacgccgcc atctcacagg acaacgggct 300
tgtgccgatc gtggagccgg agatcctgct ggacggcgag cacggcatcg agcgcacgtt 360
cgaggtggcg c 371

<210> 6306
<211> 369
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-F7
<400> 6306

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gttgagcttg gatgccttgc ctgcttccat ggaaaccaga gttttgtttg agtattatct 120
gttggtctcg gctgaagagt cataatthag cgctctgtgt gttacaccag agttaagtct 180
gcctgaactt atgtggcatt tgtttgagtt tctaccttcg tgccctgttt tctaattgtac 240
cgtggtttgtg aaccgggtcaa tgtgatctga aataaaacat tgcgtgccaa gtttgtgtta 300
caagtttgat gcaactgggaa tgccaggcaa ctaatgtggt aataaacatt ttgccaatct 360

tttttttttc

369

<210> 6307

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G2

<400> 6307

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aggagagggga aaagagagat ggtggaggca tcgccggagt ccggcgccgc gggcgaccgg 120
aagtgcctct agtacggcgg cggtgccgaa ggggaagtca tgcaagggct gcctctacta 180
ctcgtcagtg ctcaagtccc gcggttataa cccaatctgc gttgggatcc cccgctccat 240
cccccaagtt cctaactacg tgggtgatga acctaaggag gaggcgacgg cgcaggggca 300
tgacctcagg cggttcaggt acgggtgcgc gggttactcc atgttcgtgg acaacagggga 360
cggccaaggt ggtgagagcg agggcaagac gttgttgcca tattgcaggg gcctcgagtt 420
attggtggac 430

<210> 6308

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-E12

<400> 6308

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ctctttctgag agccgttccc ggtcagctcg tgggtgctcc cgggcagctt cccgcagaac 120
aatccccaca agctccacat cggcgcgccg gagagctacg cgaacatgct caagaacaac 180
atcgctccga acgacgacgg ccccggcgcg ccggcgctgt cgtcgtgcc tccgtacgtc 240
tacctccacc tggagcagtt ccagctgaag ctgtccgaca acgtcttctg cgacgaggac 300
caggtcacgc tcagcaagtt caactggatg ctgtcaagt ccgacagcta cttcgccccg 360
gcgctgttcc tgacgcccac g 381

<210> 6309
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-E4

 <400> 6309

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 attaagggga acttgcattgt ttgatgtacc cctgtagcaa aaaattcttg tgataaaatt 120
 tgttgaatta gtcactgtca gggagggatc tagttgtcag ttgtttgtat taaagctgct 180
 ggcactttcc ttgcagggtt tctgtagaat aaatgggaga aggtaacaat tttcaacttt 240
 atattgtttc ttgtggatca attgactgtt gcacctttgc aacatcagag tccgtcattg 300
 tagaattgtg cttttctgtt accttcagaa ttagatgtta ttatacctgc catgtgtaaa 360
 catcagcatg gctgcgtggt cctcctgggg cctctttgtc atg 403

<210> 6310
 <211> 426
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-E5

 <400> 6310

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 aggcatcaca gaggagcctc ttgatgaatc ccaaataagct tacatttgta gagaagcact 120
 aaagggcctt gcttacctgc actccatttt taaagttcac agagatatta aggggggcaa 180
 catccttcta actgagcaag gcgaggtgaa gttgggtgat tttgggtgtan ctgcccagct 240
 gacaagaacc atgtcaaagc gcaacacgtt cattgggtact ccacattgga tggcaccaga 300
 ggtcattcan gaaagtcgtt atgatggaaa ggtanacgtt tgggcattag gtgtatctgc 360
 aatcgagatg gcagagggca tggccacaag atccactgtg catccaatga gagttatctt 420
 catgat 426

<210> 6311
 <211> 321
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-B9

<400> 6311

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cgggcatcct cgaggtctgc gacgtgccgc tcgtgtccgt cgacttcagg tgcaccgacg 120

tctcctccac catctacgcy tccctcacca tggatcatggg cgacgacatg gtcaaggctca 180

tctcctgggt cgacaactag tggggctaca cccagagggt cgtccacctc actgacatct 240

gcgccaacac gtggaagtga agcgttgcac tgtactcgca ctttgtacct cctcaccccc 300

cacaagggct ttgggattca c 321

<210> 6312

<211> 428

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-008-Q1-E1-C12

<400> 6312

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gttcctgatg caacggtgca tctgtttaat tcaacatccg atgttattga gttaatgaga 120

ataggacatg caaacagagc agtgggttcg acaatgttga atgaaagaag cagcagatct 180

cacagtattg ttacaatata cattcgagggt gtagatttga naacaggagc tactctgtgt 240

ggtgcactac atcttgttga tcttgcctggg agtgagagag tggaccgatc ttctgttaca 300

ggcaatagac ttaaagaagc acaacacata aacaaatctt tgtccgctct tggagacgct 360

atatcttctc taccgcagaa gaatgctcat gtaccctacc ggaacagcaa acttacacaa 420

gtcctaca 428

<210> 6313

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-D1

<400> 6313

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 agttctagca gcgatccgaa gctcaatcaa ttcactcaaa cctcttcccc aaatcttcga 120
 ttagattctc gttgacaaga agactagaac cgaacctgac catgtcgctg atccgccgca 180
 gcaacgtggt cgatcccttc tccctcgacc tctgggaccc ctttgagggc ttcccccttcg 240
 gctccggcaa cagcagcagt ctcttcccct cgttcccgcg gaccagctcg gagaccgcgg 300
 ccttcgctgg cgcgcggtac gactggaagg agactccaga ggcgcacgtg ttcaaggccg 360
 acgtaccggg gctgaagaag gaggaggtca aggtggaagt cgaggacggc aacgtccttc 420
 agatcagcgg cgagcgcaac aaggagc 447

<210> 6314
 <211> 400
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-D10

 <400> 6314

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 atgagcttga ctcaattgct actcagagag gaagcagtgt gggatgatgct ggaggtgcgg 120
 ctgatagagt gcttaatcag ctactgacag aaatggatgg catgaatgcc aagaaaactg 180
 tgtttattat tggagctaca aacaggcctg acatcattga ccctgctctg ctgaggccag 240
 ggcgtcttga ccagctgac tacattccac tgctgatga gcagtctagg ctccagatct 300
 tcaaggcctg ccttangaag tcccctgtgg cgaaggatgt ggacttgaat gctcttgcta 360
 agtacactca agggtcagtg gagcagatat cacagaaatt 400

<210> 6315
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-B6

 <400> 6315

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cgacaagcgt caaggaccca aggctggaac caaacaggcg cctgctgctg ctgccgcgag 120
 cgctagcaag agcagtcgca agcttcgccg gagaaccctg ggagggacga aggagacgac 180
 tgttggtcca aatccaaaac cattattggc ccgttctcgt tagcgaggaa agggaaagcg 240
 ttgcttggtc aggtgggttg ggtaggtaga ctgtagcttg tgaatatgat ctgtcctgtg 300
 tataatgagg gtaatcggat tcttttttgg caacgagtct tgtttttttt tttaatcgtg 360
 agctgctcgg tttctgc 377

<210> 6316
 <211> 411
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-A11

<400> 6316

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 ccatgtgcta ctgcatcgtc ccgcacaagc tggaagaaaa aaacaccagg aagatcagga 120
 gggcctccgc gagccagtcc cgcggctcgt ggtcccgatc ggtcgactcg gacgaggaga 180
 tacttaacag cgagtacaag acgaagatgt acgcgctgta gcctgtagga tggatagcaa 240
 gtgtaacatg acggattctt ttgtacatac cagtgccttg ttccgccaga ggctgctcca 300
 tggcattcgg ctccgggatgc anaggctgcg gcaccacatc agtcttcaac caaaggactg 360
 aaggcccttc ctgtgaaacc aagttcaggt cacttgaccg gtgtgcctgt t 411

<210> 6317
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A3

<400> 6317

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 tagatgaagg ggaaaaaatg ggaactcaaa gatatcgaag agtaaaaaaa aggatggaat 120
 aaaagagtga ttggttgaaa agaaagagaa atagaataat gagaatcata tggatttaca 180
 caaacctcta atgattagaa actaaaaacg agatctcgaa gtaattcgaa cgatttcgat 240

tatcatttat ttgtacttat tagttacttc taccgatag agcttagaag ttggaagtaa 300
 taatttcttg gttgattgta tccttaacca tttctttttt ttgacacga ggaactcatc 360
 atgaatccac taattgctgc tgcttccgtt attgctgctg gattgcccgt agggcttgct 420
 tctattgggc ccggattt 438

<210> 6318
 <211> 322
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A4

<400> 6318

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 cctgacacca ccagatgatg agactataag gaccctctac attggcggac tcgatagcag 120
 aataaccgag caggatttga gggatcagtt ttatgcccac ggtgagatcg agtccataag 180
 gatggtactt caacgtgcaa tcgcatttgt gacgtatact acaagagaag gcgcagagaa 240
 ggctgcagaa gagcttgcta ataagctagt catcaagggc gtgcgcctga agctgatgtg 300
 gggcaagcct caagggccaa ag 322

<210> 6319
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A5

<400> 6319

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 tgcgccctcc ttccacttcg aggtccgagt cctgctttga tggcgaccga cgtggctgag 120
 actcccgcg cgttgggtgga tgcggcccca gaggcgcccg cggacgcccc ggcgggcgct 180
 gctgccgacg cgaagccggc caaggccaag aaggccaccg caccgaagaa gcgcgccagc 240
 ccgaccacc ctccgtacgc cgagatggtc tcggaggcga tcacgtcact caaggagagg 300
 acggggtcca gcagctatgc gattgccaag ttcgtggagg acaagcacia ggacaagctc 360
 ccggccaact tccgaagct tctgaacgtt cagctcaag 399

<210> 6320
 <211> 168
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-A8

 <400> 6320

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 aaaaaaggaa tgaagaacaa ataagttata atgttgata gtcttgaagg tggtcggtat 120
 aggccttcta gggtgtttcc attgggtcgt ttttttggtt tgtctttt 168

<210> 6321
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-B1

 <400> 6321

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 gcgcttaccg atccgcctct tgctgggtgc gtcgcccgtc ctcattgtcc tcaccgcgcg 120
 ttccagtgcc gaagtcatca ccctcaccga agagaccttc tccgacaaga taaaggagaa 180
 ggacacggtg tggtttgtgc agttctgcgt cccctgggtg aaacactgca agaaccttgg 240
 aacactatgg gaggacctgg gaaagggttat ggaagggtgc gatgaaattg agattgggca 300
 agttgactgt ggtgtcagca aaccagtatg ctcaaaggtc gatatacact cctacccaac 360
 attcaagggtg ttttatgaag gcgaagaagt agtaaaatat aaaggaccta ggaatgtgga 420
 atcgtgaag aacttc 436

<210> 6322
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-B11

 <400> 6322

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cgagcgagag acctagctag actgaccggt cgccggcagc gcaggccgag aacgaagcgt 120
 ttgtgcattg aaggagcaag agccatggcg gaacagcagc agccgcagga gatggacgtt 180
 gaccgtaccg gtggcctcga actgcctcca gggttccgct tccacccgag cgactttgag 240
 attgtcagcc actacctcaa gaataaggtg cagcacaggg actacagctg catcgccatc 300
 gcggacgccg acctaaacaa gaccgagcca tgggacctcc cgaaagttgc aaagatggg 359

<210> 6323
 <211> 439
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-B2

<400> 6323

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 ctgtcctctt tcgtttcttt cttgtcggcg acggctggcg gctgggggtgc tgcgccgctc 180
 tcaccttcac cgccgacgag cattcacaag tagtggctctc ttactgggtgg cggcgtagag 240
 gtgacgaaaa agccttgaca atgagcagca taggcacagg ttatgatctg tctgtcacca 300
 ctttctctcc cgatggccgc gtcttccagg tcgagtatgg cacgaaggct gtcgacaaca 360
 gcgggaccgt tgttgggatc aagtgcana g atggcattgt tctgggtgtc gagaagctgg 420
 taacctcaaa gatgatgct 439

<210> 6324
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-B3

<400> 6324

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 agccgctggc ggacctgctc aaggagcaca acctccccgt gggcctgttc ccgcgcgagg 120
 cgaccaacta cgagttcgcg ccagagacgc ggcgcctgac ggtgtacatc cctccccct 180

gcgaggtcgg ctaccgcgac ggctccgagc tgcgggttcga cgccacgggtg tcggggcacgc 240
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 gggtcaccgc cgtcaaggcc gacgccgcca aggtccactt caccgctggg atcaagaggt 360
 cgcgcagccg ggacgcctac gaggtcgtca ggggcggcat caccgtcgac gagttctagc 420
 ttagttttgc tttcgccgct cacatggatg gac 453

<210> 6325
 <211> 141
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-B4

<400> 6325

acggacgcgt gggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaaaattaaa aatataacaa actaatataa acgttcatta aaaatgttaa aatcttttaa 120
 attgacttca aaaaaggggg t 141

<210> 6326
 <211> 427
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-007-Q1-E1-G4

<400> 6326

accaccgtca cggaacttgg gaaaactcaa taaaaggata ccaaaccttc ctggtgggggt 60
 tccggtaatc caggtggaac cacaaccaga acctgaacta aaagagaaga atttaagatt 120
 tgaggatgcc ctaaagtcaa ccaaggctgc tggtgaggaa ggtattgttg ttggtggagg 180
 atgcaccctt ttgcggcttg cagctaaagt cgatgccatc aaggatacac tggagaacga 240
 tgagcagaag gttggagctg aaatagtaag gagggccctg agctaccacac ttaaattgat 300
 tgctaaaaat gccggtgtca atggcagcgt cgtcactgag aangtccttt ctaacgataa 360
 cttcaagtat ggttacaatg ctgctactgg acagtacgag gacttgatgg ctgctggtat 420
 cattgat 427

<210> 6327
 <211> 210
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-G8

 <400> 6327

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 gggatgattc agcggtaaag gattaggctg atactgtcga tgaagatgta tctagagcag 120
 atctcgtgat aaatgtggtg agactgatgt ctgccacaac accaactt tcttacggga 180
 catagtcgcg tttcatgaga tgcagtggat 210

<210> 6328
 <211> 277
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-H12

 <400> 6328

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 acatcttcaa ggtcctgaag catgtgcacc ccgacatcgg catctcctcc aaggccatgt 120
 ccatcatgaa ctcttctc acgacatat tcgagaagct cgccggcgat gccgccaagc 180
 tcgcgcggta caacatgaat ccagcatca tctctcgcga gatccagacc tccgtgcgcc 240
 tcgtcctccc aggagagctc gccaaacatg ccgtctc 277

<210> 6329
 <211> 349
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-H2

 <400> 6329

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 gctgccggag aacgtggacg tggagaggat cgccgataa gtgaaggacg gagtgctgta 120
 gctcaccatc cccaagctgt cgcggggggc caaggtcgtc aacatccaag tgcattgatg 180
 ctgtgggtca gattcatcag gacgattagc acctgctgcc gtgcttttcg gagcttcaag 240

aatctggatg cttgggacga gagcgatatc gatctagcta ccagtcttct ttccactctt 300
 ctttttctgt ttcgttccgc gattttgttt gcaatgtcac acatggtaa 349

<210> 6330
 <211> 346
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-007-Q1-E1-H3

<400> 6330

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 cctccgccgc tcgggcttcc tgnngcgcgt cgtgctggcc gcggtgccag tggccgtgga 180
 cgccaccgcg cgccgccgcg tctccgtgtc ggtgcggatg gcctgggacg gtccgctctc 240
 gtcggtgcgc ctcatcatgc agagcaggaa cggaagctg agcgagaagc tcaaggagca 300
 catcgaggac aaggtgggtc gggcggtgtc cangcactgc cacctg 346

<210> 6331
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-H7

<400> 6331

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 catcctctc gccgtcgccc tcgctccgc ttctcggca cccagcccc cgccgtgcag 120
 ccgtcgtgc gcggccctca actgcgactc ctcgggatc cgctacggca agtactgcgg 180
 cgtgggctgg aacggctgcg acggcgagga gccctgcgac gacctcgacg cctgctgccg 240
 cgaccacgac cgctgcgtca agaggaaagg tatgatgagc gttgaatgcc atgagaaatt 300
 caagaactgg catgaggaaa gtgaaaaagg caggcaaggt tggcttctcc aagaaatgcc 360
 cgtacgagat ggctatggct acaatgactc aggggatgga tatggccatc atcctt 416

<210> 6332

<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-G12

<400> 6332

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tgctctactt ctgcctgatg gcccttgctg tagctgctat ggtctgtgtc atgtacacca 120
cctcggcaca agcaggaagg agtggctaca actcgtacga acctgatgga aggggtggat 180
acaactctgt tcccatcaac ggcgggtggca gcccttagct aggcgggtgga tccgagcctg 240
tatcagaaat cgaaataata taagactgtc ttcaacggat cacactgccg ctccccacg 300
ctaaatttgg gggctacagt gcacacgcta gccgattaac ggctcacgct accaggcgct 360
ctacgcggat gtgcccccta gccagcttct ctctccccct cgttctgtgg tgctctctc 420
aacct 425

<210> 6333
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E7

<400> 6333

cccacgcgtc cggcagattg tacctcgagc tctggaggat tcattccgca gcacggcttc 60
cttctcgag tcgttccgta gcaactgcctc attctccaag tccatcatgg actcatccat 120
ggatttcaat agcgtcgtc tctctgacat cgctggcagc agcgtcgtc tcacgggcgt 180
tcctggtagc agctctcgtc tcgcgggcgt tcctggcagc agcgtcgtc tctcgggcat 240
tgctggcgcc agattggaca acgacgagga gagtgaacc acggagaggc cactggtgct 300
tcgtaataaa ccgcctaggt ggcacgaaca gctgcagtgt tggcgcctca acttccgtgg 360
ccgtgtgaca attgcctcgg tgaagaactt ccagctgaat gccgccgcta 410

<210> 6334
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E9

<400> 6334

cccacgcgtc cggcgacatg gagtacagaa agaggggtgga tgcgttagtg tttttctcgt 60
tactttctct cggatacttt gctgctcatg cacatgggaa gggtcatgcc atagatgatg 120
tcgggtgtttc tactccagct aaagaaggaa ttatgcaagg aaacggagca tgatgcattg 180
tagggtttcc tccatgcaaa gataacaagt gctactgctg cattgggggg cgaactcatg 240
ttcgtacttc tacgctggct gagtgtagtc atgctgctt ctaaacaaaa attaagatca 300
ctgttattat atacattgta ctggtaggta atgctattaa taatatatgg taattttagt 360
tttggtatta aaaaaaacca aataaaacaa ctaa 394

<210> 6335

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-F10

<400> 6335

cccacgcgtc cgcccacgcg tccgcagggg ctgtacatgg gcaacggcgg cggcgccaac 60
gtcgtggcgc ccggctacac caagggcgac ggcctaggcg ccgagatcgt cggcaccttc 120
atcctcgtct acaccgtctt ctccgccacc gacgccaaga ggaacgccag ggactcccat 180
gtgccgatcc tcgccccctt tccaatcggg tttgccgtgt tcctcgtcca cctggccacc 240
atccctatca ccggcaccgg catcaacccc gcgcggagcc ttggcgccgc cgtaatttac 300
aaccagcacc atgcgtgggc tgaccactgg atcttctggg tcggccccctt catcggcgct 360
gcgctggctg ccatctacca ccaggtgatc atcanggcga tcccgttc 408

<210> 6336

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-G1

<400> 6336

gggccgagcc acgcgtccac ccacacgtcc gccacgcgt ccggccacat cccaggccgc 60

cgagatgcag ctcaaggctcg gttggggcccc ctgggtgaag gaacaggcca actacctaag 120
 acacaatcgg atcctctgct caaatctaga ttcccttact tcgagcaacc acccgctgct 180
 ccaggatgcc tcagccacca acaactcgcc caccaagtac tcgacagaat gcttcagcca 240
 tgacatcgtc ctgttgagga ctatcagtgc tgcaccaca agcgaagacc gcgcgctgca 300
 gcagaggcgc cacgagtgcc tcgtcacgcg gcccgagttg gcgaggattg gcggacggaa 360
 ctacatcatg ctcgagcatc accccaacag gat 393

<210> 6337
 <211> 423
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-G10
 <400> 6337

agggcgggga tgacgagccc aatggtggcc accccggtcc agttccacac aaccggccgc 60
 ctcagcttct gtcctttttc ctttcccagc gcatcagga ggcggcgatt cgcggcggtg 120
 agggcggtccg cggagacgat ggcgacggag aagctgggca tcaaggtgga gcgcaacccg 180
 cccgagtccc gtctctccga gtcggcgctc cgccagtggc ccaagtgggg gtgcgagaag 240
 agcaagttcc cgtggacctc ctccgccaag gagacgtgct acctgctgca ggggaagggtg 300
 aaggtgtacc ccgaaggcca cggggaggag ttctgtggaga tcggcgcggg agaccttgtc 360
 gtcttcccca agggcatgag ctgcacctgg gacgtcgccg aggccgtcga aaagcactac 420
 aac 423

<210> 6338
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-D10
 <400> 6338

cccacgcgtc cgcccacgcg tccgcgagcg cgtgggggttt caagtaacct ggagcaaaag 60
 aattcccaga agttggaaga ttcatatcaa cagtcccatg gcaagggtat gaagaacttc 120
 aatttgaatg agacactgtc agattgtcag gaagatggtc ttgtagaaca agatgggaga 180

tgtgcttcca gttttcagca tgataaagat ggggggctag tacttgggat ctcttggctc 240
 aaaaaaaact tatgtctgct gacccaacag ctgtggagaa gccaggaag atttttggac 300
 attcattggg aactgcaata gagctgaaaa atactaaaga ccagaatgaa ccagctgtga 360
 ctattcggaa tttgtcagat tctgcttcta catctgttgg ctgtgcaat 409

<210> 6339

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D11

<400> 6339

agcccacgcg tccgcccacg cgtccgggac aggaagata taggagagag catgacagca 60
 acagaaggac ttcagatgtg aggaagtggg atggtgatag tagcgagttc gaggcacag 120
 atgaagaatg ggactctggt gatgacaggg gtaatgctct gggcttcgac aatgatagag 180
 gttctactga tgagcaccct cggcgatttg gaagcatgag ggaacaaaag agtagattca 240
 atcgggcaca ggattttgtc cctaggggag gcgtgggtga ggggaagggt ttcaatagaa 300
 gctatggcaa cccagatgct gatgttcaca atagaggcca gggaagacat aggagagata 360
 ataaaagaac atcagatgca aggatgtggg atgataatag tgag 404

<210> 6340

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D12

<400> 6340

ctcttttagg accttgtttt cttggatgct cctattttat tttgcgtttc taacatctat 60
 gtggttcaag gttttcattg catgttgact tatttttagc tccaatgat gttaatgtta 120
 tgttgcatct tgacataaga tcttttttaa aaaaaaaat cgtgcatgtc gtctgtctgt 180
 ttctgtattc ctataaatgt tcttagatct taacatattg cacttcgtgg gaatgatact 240
 gttctaatat atcattttta tgtatttttg catacaagat atacagaaaa atgggtgaag 300
 gtacttttgg tcaagtactg gaatgctggg accgagaaag caaagagatg gtggctatta 360

aaattgttcg ctctgtaaag aaatacagtg atgcagcaat gatagaaatt gatgtcctgc 420

<210> 6341

<211> 422

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-D3

<400> 6341

gggccgagcc acgcgtccac gacatgtttc attgattctt gaagagatca agctcctttt 60

gccacaacaa ggtcaaggat ttcttgcaac tgcggttcaa cctgcggctg cggctcaagc 120

tgcaagtgcg gcaagaagta ccctgacctg aaggagacga gcaccgccgc gcaggccacc 180

gtcgtcctcg gcgtggcccc ggagaagaag gccgcgcccc agttcgtcga ggccgcggcg 240

gagtcggcg aggccgcnc a cggctgcagc tgcggtggca actgcaagtg cgaccctgc 300

aactgctgat cacatcgatc gacgacctg gatatgatta ttatctatct agcttgtggt 360

ggtggttgaa caataataag cgaggccgag ctggctgcc a tacatagggt atgtgtggtg 420

tg 422

<210> 6342

<211> 230

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D4

<400> 6342

acgcgtccga gcgactagag ccaaggcagc acgttccccg caggagaaga acaacaccgc 60

aggcgccccg gaaatcagtt caggggccgc aaggcgtgga agtgaaaaag cctctgctgc 120

cgctttgcga ttcatctagc cgaatggcca atttttttga ctctttgtat cttcttctgc 180

cagttaatgt ttccatataa taccttgatt ctatgagaat gcttttccat 230

<210> 6343

<211> 183

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D5

<400> 6343

gacccacagc gtcagccac ggcgtccgcc acgcgtccgc ccacgcgtcc gcggacgctt 60
gggcggacgc gtgggatggc gccctcgtag accgctagtt cgggccacga cttcagtgtc 120
gacgatgcta tcggcaatga cgtttacctc agcactgtat aacgggaagg ttcttctcat 180
tgt 183

<210> 6344

<211> 426

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-D9

<400> 6344

aggcgcaagc acgtacgttg tcggaagctc aagttagaag aagcaccagt gcctgatcga 60
tggcggccca ggctctctc tccggccggc agctgctggg cggccccgtg cagtcggccg 120
tctctaggtc gtcggcgagg aaggcgccct tcgtcgtcag ggccagctcc agccctccaa 180
ccaagcaagg tgccgacagg cagctgtggt tcgctgctcaa gcagtcctc tcctacctcg 240
atggcacgct gcccggcgac tatggcttcg acccgctggg cctctcggac ccggagggca 300
ccgggggctt catcgagccc aagtggctgg cctatggcga ggtgatcaac ggccgctacg 360
ccatgctggg cgcggtgggc gccatcgccc cggagatctt cggcangatg ggcacatcc 420
cccggg 426

<210> 6345

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E1

<400> 6345

ggtctagaat aacgggccga gccacgcgtc caccacacg tccgcccacg cgtccgcca 60
cgcgcccgcc cagcggtccg cccacgcgtc cgccaagttt ttgagccttt cagtattctt 120
ggactggaat ctggggcatc tgaatctgat atcaagaaat catataggag gctttctatt 180

cagtaccatc ctgataaaaa tctgatcca gaggtcata agtactttgt tgaatatata 240
 tccaaggcat atcaagcatt aactgatcct atatctcgag agaattatga aaaatatggt 300
 caccctgatg ggcggcaggg gttgcaaag ggcattgctt tgcccaagtt cttactaaat 360
 attgatggtg catctggtgg gataatgctt cttggaatag tcggattttg tatattattg 420
 cctttgatga tagctgtta 439

<210> 6346
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E10

<400> 6346

ctcaggcatg aaagtcacta ttcgtcagct gggcccttcc atgatacagc agatgcagca 60
 gccttgcaat gagtgcaagg ggactggaga gagcatcaat gagaaggacc gctgcccagg 120
 gtgcaagggg gagaaggctc ttcaagagaa gaaggttctt gaggttcatt ttgagaaggg 180
 gatgcaacac aaccagaaga tcaccttccc tggatgaagct gatgaagcgc ctgatactgt 240
 cactggagac attgtattcg tctccagca gaaggatcac tccaaattca aaagaaaggg 300
 tgaagatctc ttctatgagc acaccttgct tctgaccgaa gcactatgtg ggttccaatt 360
 tgttcttaca catctggaca acaggcagct tctcatcaaa tc 402

<210> 6347
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E11

<400> 6347

gggacagcta gcattccagt gactgtacct gaaggaactc atcctgatca aacaagtgat 60
 caagtgggaa tcaatggaag catgaacca tgcattcatc caatgggttc tgctgacca 120
 aaatttggtg gtagtgccac accacagact ttccctcata attatgcggc ctttgctcca 180
 atgatgcagt gcaactgtaa ccaagatacg tacaggatc tccaacacat gtcattccacc 240
 ttctccagca tgcttggttc cacgttggtg tcaaaccctg ccatccatgc agccgccagg 300

ctcgcagcat catactggcc agcagctgaa ggtaacactc ctattgatcc gaatcaagaa 360
aaccctgcag atggcggtcca aggaaggaac ataggctctc ctccaagcat ggtttctatt 420
gt 422

<210> 6348
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E12

<400> 6348

gacccacgcg tcagcggttaa atcaaaaatc aaaaaacaga aaaagaaaag aaaacatcat 60
aaaaaaaaaa aatgaatcca atcggaatca ttgaaagctt tgttcctatg catcgaacca 120
attggtttct gtcgatccag tctttggcat taatgccact ccacagactt tccctcatat 180
ttgtgcgggc tttgctcggg ggttgacgtg cgactgtaac cacaatacgt ccaggtcatt 240
caccaggtgc gtcttcatcc ttctcgagca ttcttttttc cacgttggtg ttttcctctg 300
ccatctgtgg aaccgcctgg ctctcatcat cttactggcc atcaggtgaa tgtcccactc 360
ctattgatcc gtatcactat acctgtgcac atggtttcca ccgaacgatt ataagctctc 420

<210> 6349
<211> 308
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B4

<400> 6349

gggccgagcc acgcgtccac ggaaacgtgg gaccaggcgt tccgcgacgc cccggcaaac 60
aagctcacgg gcacccccaa gtccgccaac ttccgcccct tttcgttcaa cttcagggcc 120
cccaacttct ctccaacaat caaaccttcc ccaacaaggg ccatggccaa caacatggtc 180
aaggtcacct cctggtacta caaccattgg ggctaccccc agagggtcgt cgacctcgct 240
gacatctgcc ccaaccggtg aaagtgaacc gttgcattgt aatagcactt tgtaactcct 300
caccctcc 308

<210> 6350
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-B5

 <400> 6350

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 catatggcta catatgcaca tcattgaaga tattttcgtc aattgccgcc aagttttcaa 120
 aggctcagtt aactatgctt ggacaacagt acctacatac cctagcggag ttattggggtt 180
 catgctttgc tccaccgaag ggcttgcgtg tgatttccag caccctgttt tcaacatcga 240
 ggaggatgaa cattctacga aatcaaaagg accccttaag ttctacaact cggagatcca 300
 cacggcatca ttctgtttgc cctcttttgc aaagagggtg attgagtcaa aggcaagcta 360
 gacgtgagga tacttcacca agtccagtcg attgggttaa gtaccttagg cgcaacacaa 420
 aatttgttgt cctgttaaaa 440

<210> 6351
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-B6

 <400> 6351

 cccacgcgtc cggacggaca ggccgttgcc gcccaggagc ccgcaaagaa ggctgtgaag 60
 gttgagaccc ccagcagcga caagaagaag gtacagttca ccaagaacct cgagatgggc 120
 cccactggct cgcccagggg tgacgaaaag aaggaagccg caaagcccgc cgccaaggga 180
 ccccgcaacg tcagcggcgt caccgtcgac gacaagaggg agggtaaggg caaggccgcc 240
 aagaagggcg accgtgtcga gatgcgctac attggcaagc tgatgaacgg caaggtgttc 300
 gactgtaagg catgaatccc aactaacttg agctgtactg acgtgctacc agccaacaag 360
 aagggtgaag ctttcgcctt caagc 385

<210> 6352
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B9

<400> 6352

agccccacgcg tccgagaggt gtagatattt ttaagaaagc gtacataatt ttgccgatta 60
atgaatcgat gcaactggagc ttgatcattg tttgcatgcc tacaaaagag gcagattctg 120
ggccaataat acttcacttg gactctcttg gtcttcactc cagtcaaaag ctttttgaca 180
tagttgagag ggaggatatg gaggcgtctt tcgaaaaata tcaataggga aaagattgag 240
gtgccacgtc agcgtaacga gtatgattgt ggcctcttta tgctttacta tattgacagg 300
tttattcaag atgcgccaga gaggttgaca aaagagggcc ttggcatgtt tggacgcaga 360
tggttcaacc atgaagaggc ttacgcgttt cggggagggg taccggcgct actga 415

<210> 6353

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B3

<400> 6353

gcgtcaaaga gaaattgcc aacagtgcca gggaacccaa ggggtggaaa agccaatcaa 60
gggccccaac cccaagtggg gggcgtgggc gcaagcgggg caacacaaaa acccgggggc 120
aaagccgat tcaagattcc caaccgggat ctcccagggg gtggacgccg tgaacgtgac 180
gagaggagat ctacgagtct tagctacagc aggagcgcaa gtcccaggcg ttccgtctca 240
cctgcaaagg aaaaggagcg cagtcgcaca cccaatggca gtaggagccc aaggagcccc 300
agccaaggg ctttggtgag cccaccactg aaggataatg gtgcacgcaa tggctcagac 360
catgaaggca gccccggtgg tggagagaac agc 393

<210> 6354

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A1

<400> 6354

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aagatgcagt ccaaaagcat tcagtgccca gccgacagcg acgaggagca tgagcaagcg 120
aaagaagatg ggccagctgg ctgcgctgac gaggaggcac ctcttccgac gtcagtcaag 180
cctcgcgagc acgagcacgg ggaagaagaa gaacaccaaa tggaggcccc tctcttgtec 240
tgcgagagcg aggttgctga caaggggttc tggacgaagc tgaaagacgc tatccaccag 300
ttcatcaagg agctgatggc accgcccacc atatccgcga taattgggtt cgttgttggc 360
ctggccccat ggctgaaatc cctaatacg 388

<210> 6355

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A11

<400> 6355

agcaaggcag tacccttggc atatcgtgac attttcaaca atttcactac tagggaaatg 60
ggccttgcta tgggtactctg agtctctgac aacccttag gaaatcacct tacacctact 120
tgtgttgaaa aaaatgctaa ctatatataa ttgatctaac atgcaactat catatacctt 180
ttcatgacat gtcacacctg tgacatagta attcatgttc gcgtactcgc ctatacacat 240
ttctcttttg tttatgtcac atttaagaac taaaaacttt actcatgtca cattcaaaca 300
aaaacattgc aaggaagaat tatgcaagtg tcatgttgca aaaaaagggtt ataaggaagt 360
gacatattct gacaagaagt aataagaaat cacgtagaag tactatatca ct 412

<210> 6356

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A3

<400> 6356

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ggccgctggt cgggttcacc aagtcgaacg agctgttcgt ggggcggatg gcgcagctgg 120
gcgtggcctt ctccatcatc ggcgagatca tcacggggaa gggcgcgctg gcgcagctca 180
acatcgagac ggggggtgcc atcaacgaga tagagccgct cgtcatcttc aacgtcctct 240

tcttcttcat cgccgccatc aacccccggca atggcagggt catcatcggc gaggaagagg 300
aataggctgc tggcctcgga catgagtcgt gtgcgtttac ttttacctgt gactgtgagt 360
gatcgatcgg tgcgtctcgg tgcgcgcgcg taagtgcctt gctgtgtgta tcaattactc 420
gtgatg 426

<210> 6357
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A5

<400> 6357

agaattggaa gacctgtttc agattcagtc gctggatctg attctccaag atgaatctgt 60
acatatgctt gccttaaaat ggtctcaaca tttctgtgaa gagtacaatc cccgtaaata 120
tagaggcact ctcttttcta cccctgcagt tccatttagg ctgatgcaac taccagatgt 180
gtaccagggt ctcttagaaa gatatatcaa gatgcaatgc cctgattgtg gctcagtgcc 240
tgatgaaccg gcaactatgt tgctatgtgg caaactatgt tcgcctagtt ggaaaccatg 300
ctgcaggact gggaaatgcc agaatcatgc attgcaatgt ggtgctggta ttggcatatt 360
tcttctagtg aggaaaacaa caatcctgtt gc 392

<210> 6358
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A9

<400> 6358

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gtgcccagcc aaaagagcga ttgaagactt gatcatcaat tcttcggatt agcctgcttc 120
tcgtcctcca gcaccttct tggcatctct ttctggagca gcgcccacga gttcaacgaa 180
aaacaacatt gaatgaagat attagcgaca ttgatgacat tctttccatt aaaacaatta 240
tcatttctga ttttccagat tgtccataaa actgcactac agccagatgt caaacatctc 300
tttagcattt cttggaaagg atggagagtt cttcggatta actgattttt tttgaggcca 360

cacaatcagt ttaattcttc ggattaactg attttccaga ttaactg

407

<210> 6359

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B10

<400> 6359

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tcgggtggtc gtggggcccg ctgggatgga cggtgccgag cgagatcgtc ccgctggaga 120

cgcggtcggc ggggcagagc atcacggtgg ccgtgaacct gctcttcacc ttcgccatcg 180

cgcaggcggt cctgtcgtcg ctgtgcgcct tcaagtccgg catcttcctc tttttcgcgg 240

ggtggatcac cgatcatgacc gtgtttgtct acgtcttctt gccggagacc aagggcggtgc 300

ccatcgaaga gatggtgctg ctctggcgga agcactgggt ctggaagaag gtcatgccgg 360

acatgccgct cgaggatggc tggggcgcggt ctgagggtca tg 402

<210> 6360

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B12

<400> 6360

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tcacgcacga gctcgggatg gaggtgttcc ggtcggaggt ggagaagagg atgccgaacg 120

gggtgctgga gcgcgccgcg ccggaggacc tcgtcgacaa gcgctgggag cggcgggact 180

acctcggcgt gcacccgcag aagcaggaag gcctgtcgta cgtgggcctc cacgtgccgg 240

tgggccggct gcaggccgcg gacatgttcg agctggcgct gctcgccgac gaggacggca 300

ccggcgagct ccgggtcacg gtggagcaga acatcgtgct ccccaacgta agcaacgaga 360

ggctcgacgc gctgctggcg gagccgctgc tgcaggagca gcggctctcg ccgctgccgt 420

<210> 6361

<211> 438

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<212>      DNA
<213>      Zea mays

<223>      Clone ID: LIB189-006-Q1-E1-G3

<400>      6362
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<210>	6363
<211>	405
<212>	DNA
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<223> Clone ID: LIB189-006-Q1-E1-G5

<400> 6363

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ttcattgcc aatgaggagaa ctcatctgtc actggcattg gtgttgatgg cctcgtgaag 180
gatggattac ttgacaagct caaaacagga cccttgtttt ggatagatac agctgataag 240
cagccatgca ttggcactgg tggaatgatt ccatggcatc tcaaggcaac aggggaagctg 300
ttccacagtg gccttgca ca taaggccata aatgcaatgg agatgaacat ggaagcacta 360
aaggtaatcc acaaacggtt ttacactgac ttccctccac atgag 405

<210> 6364

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G7

<400> 6364

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cgctgctgc agccatggcg acctccgagg cgctctctac cgccgccaat cccacccagc 120
tctgccggtc ccgcgcttcg ctgggcaagc cggatgaagg gcttggcctg agcatgggccc 180
gcgagcgcg ccagcggagc attgtgtgcc aggcggcgag cagcatctcc gccgaccgcg 240
tccccgacat ggagaagcgg aagctgatga acctctcct cctcggcgcc atctcgttgc 300
ccaccgtcgg catggtcgtc cctacggcg ccttcttcgt ccctgccggc tccgggaacg 360
ccggcgggcg gacctacgag aaggacaagc tgggcaacga catcacggtg gaggcgtggc 420
tcaacac 427

<210> 6365

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G9

<400> 6365

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gaggaggacg acgacgagga cgacagcacg cggcgaccta atgcgaagcg gcaggttgtg 120
gttgcggtgcg tggacgcgctc ctcgatcgctc gtccatccgt gaccaaaca gaagaaaaag 180
tatcgcgcgct gtgtgtggct tttgcctagc gtagccagcc aaataagggt cactgcgcg 240
taataaatcc tagtggtgta cagcagacgt agccgccact cctgctctgt gggtttcgcg 300
cctcgagggtt tttgtgcttt gcagtgtatc tagcgccat actaatcgt gcttccagct 360
tccatccagt taaaagtcta ccagcttgtg g 391

<210> 6366
<211> 419
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-H10
<400> 6366

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gaactctgct gcttatttgc aacaacaaca actactacca ttcagccagc tagctgctgc 180
ctaccaccag caattttctc cattcaacca actggcagca ttgaactctc ctgcttatgt 240
acaacaaca ctactaccat tcagccagct agctgctgtg agccctgctg ccttcttgac 300
acagcaacag ttgttgccgt tctacctgca cgctgcgcct aacgttggca ccctcttaca 360
actgcaaca ttgctgccat tcaaccaaca tgctttgaca aaccaaca cgttctacc 419

<210> 6367
<211> 410
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-H12
<400> 6367

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ggacgtgggtg ggcaagagca ggggcgacac ggccgtcacc accatcgta acctggcgga 180

ggaggccaag ctcgcgcgcg agggcggtcaa ggcgcccggc caccagatcc tcaccatctg 240
 caagtcgctc gtcgccggcg gcgtagcagg cggagtgtct cgtactgctg ttgctccact 300
 tgaacgattg aaaatattgc ttcaggttca aaatccgcac agcatcaagt acaatggtag 360
 tgttcagggg ctcaagtata tctggagaac agagggcctc cgtggacttt 410

<210> 6368
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-H2

<400> 6368

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 acgaagaaat ccacggacaa catcaataac aagctgcagc ttgttatgaa gagggtgcaag 180
 tacactctcg gctacaagac cgtcctcagg actctcagga actctaagtc gaagctagtg 240
 atcatcgcta acaactgccc gccccttcgt aagtctgaaa ttgagtacta tgctatgctg 300
 gccaaagtca ctgtccacca cttccatgga aacaatgtcg accttggaac tgctgtgggt 360
 aaatactttc ggggtctgctg cctcagcatt attgattctg gtgattctga tatcatcaag 420
 actaca 426

<210> 6369
 <211> 424
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-H3

<400> 6369

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 ccatgtcgaa gcaaggaggg aaggccaagc cgctgaaggc gcccaaggcc gacaagaag 120
 agtacgacga gacggatctt gcatatctgc agaagaagaa agacgaggaa aaagcactga 180
 aggagctcaa ggccaaggca caaaagggcg cgattggagg ctcgggtctg aagaaaagt 240

gaaagaaatg agactgggtca cccgtctcca ttacctagag gatgataagg cagctgtcta 300
tctgtgttgc gcttcaactac gtgtgattgt aacagtggta cctcttgtgt tctgtgttcc 360
gcgatgttgc agttgggttgc ttgatcgana gatgtttcag cctcccatct gctagctatg 420
atac 424

<210> 6370
<211> 428
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-H4
<400> 6370

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cattgaactc tgctgcttat ttgcaacaac aattaccatt cagccagcta gttgctgcct 120
acccccagca atttcttcca ttcaaccaac tagcagcatt gaactctgct gcttatattac 180
agcagcaaca actactacca ttcagccagc tagctgatgt gagccctgct gccttcttga 240
cacaacaaca gttgttgccg ttctacctgc acgctatgcc taacgctggc accctcttac 300
aactgcaaca attgctgcca ttcaaccaac ttgctttgac aaactcaaca gtgttctacc 360
aacaacccat cattgggtggg gccctctttt agattgctta tgagttatag ttcaataatg 420
aagttttt 428

<210> 6371
<211> 424
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-H7
<400> 6371

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gcgcaagttg tcagggggcg tgccggagcc gtgcggcggc cggcgggccg gagcgggggc 120
gatggggcgc tacgagctcg tccgcagcga cgacgcgcct gccgtcgccg cggatctgga 180
ggccggcacc gccgcgccg gcgacggcta cccaagcgc cgcgtgccca cgccctctcc 240
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caccgtcctg ctgatgatca tcgtggatga cgccggggca ttcgttccgg cgatgaacca 360
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 cgga 424

<210> 6372
 <211> 324
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-G12
 <400> 6372

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 gagctctccg tgctgtgcta taccgacgtc gcgctcatcc tcgtctcttc cacggggaat 120
 cgctcgtaat tatccaactg caatatggat gagataattg acaactactt cacacattgc 180
 tattttcgtg cgggacaaca gagcagactt cgctggactt taacttatag catagcatat 240
 atgtaaattt gaatgaccag cttgcggtac caagccttcg actcatgcag attaaagggtg 300
 tagaacttga tggatttaat gttg 324

<210> 6373
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-E9
 <400> 6373

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 ccggcgccca agctcagcga gacggcgacg aagccgtcag ccgcgaagag cggcggcggtt 180
 aagaaggctg agcagaagcc ccgggaaacc aaaaggaagg tgaagagcag caaacaggcg 240
 gcggcgccca aaaagtgacg tacagtacgt gtggagtgtg atggagcttc catgcatgag 300
 tgaatccatg ccatgttatg aatctagtcc ttcctttctt gtatcttcca tgtgacgcgg 360
 cgtgtgcgtc ccctcatgtg tgatgatg 388

<210> 6374

<211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-F10

 <400> 6374

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 cggttgcctc tggtttcccc tctctctgtt ggtggctggc atcccatctc ccctgcgttg 180
 gacggctgcc gcttcgttct cgtcgctggc gttcgtccct gtcccagcta gttctcatgg 240
 ccatgcctct gtccctagg tccgagctcg cccaactccc tagccatctc tgctcgcccc 300
 tctctgtctc tgtgcgagca gcagcacgac ggggcagacc tatgtcctcg acgcgcacca 360
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<210> 6375
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-F4

 <400> 6375

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 tcttccgctc cgccctgtcc gcgccacacg gcgccggcgc gcgcgtccgg ccgcagcgcc 180
 ggcagccggt cttggctccg ctccacgcgg cgaagggccc cggctcggcg ccggtggtgc 240
 tggagggcaa ggccaagga aagaagaaga aggggccag ctccgggaac cttcccgcag 300
 ccctcgacgt cgagatcagg gaggcgcagg agtacctcga cagcgaccag caggaacctg 360
 ttccagaaaa ctttccattt gaattaatcg acgaagaggg tatgagcgtg gttattttga 420
 gaagggacta caaggacgag 440

<210> 6376
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F5

<400> 6376

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cagtcgacgc ggcaaaggcg gcggcaggca aggagcccg t aagccccgggc actccgtcct 180
cgggtggccgc cggccgcagc agctgtgagg agaggcgcgc ggtggacggc gtcgccctgc 240
ctgggtggaa gtcgacgcc ctctgccagg agtcctgccc gtcgccggcc atgagggcgc 300
gcttccccta ctacttctga agcttcccgt tgcagtcctg cgtgatcgag ttcttgagcg 360
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<210> 6377

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F7

<400> 6377

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atcatccaag gactcttgat gctttccatg gtacttctgg catcgtgtgc tattcatgca 120
cacataataa gtggggaaac tgaagagggt agcatcacag ggagccccgac agtgatggtc 180
atgatggggg caaaccgaaa gataattgaa gataataaaa atttattgtg ctatctaagg 240
gctctagagt actgctgtgc gaggaccaga caatgctacg atgacataaa gaagtgcttg 300
gagcattgcc gtggttgaaa ggtgtaataa aggatagct ttccttggat cttagtgtgt 360
gatcagaaaa atgttctacc aattcatgca tgtaccatag gataatat 408

<210> 6378

<211> 311

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G1

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ggtgaccatc cataccccga aggaggagga cgagctgcgc cctcctgtct tggcagctga 120
 ggtctaaggt cccaacagcg tcctcgaaat ggcagtttga tctggctcta gctaggtttg 180
 tatcttatga taagggcagt gctaagacag ttcgttccgt gtcacttctg tttaaaatta 240
 agttttgccg agacaagcta tatgtaccgg atgaaagtgt ggttccttat tgtatgctct 300
 ggaattttat t 311

<210> 6379
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-G11
 <400> 6379

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 ccatagcaat cctggaacgt ggatacagtc gcacaatccg ca 402

<210> 6380
 <211> 371
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-E7
 <400> 6380

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 gtgctcttca cccgaagatt tgccaatttg cggagcggaa cctgatgtg ctgttcttgc 180
 aagtgaacta cgaggagcac aagtctatgt gctacagcct tcgtgtccat gtgctaccct 240
 tcttcaggtt ctacagagga gcacaggac gactctgcag cttcagctgt acaaacgcaa 300

ctattaagaa gttcaaggat gcacttgca agcacaagcc agatagatgt agccttgggc 360
caaccgggg g 371

<210> 6381
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-D12

<400> 6381

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cagtgtcatc gtctccactg tgccacgaga cttctcgatc gagacgttcg gcagcccaaa 180
agacgtgggg gaagtgggtgc tcagaaggat cgcgaggacg aggcgaagcc cggacatcaa 240
cgctaccctt atcgacgccg ccgtgagaga ggacgcgggc agggatgaagt actacaagct 300
ggagtccga gtcgagagcc cttctttccg gcggcacaac gtcgcggtct gctgcgtgag 360
ggacggcagg ctctacacca tgaacg 386

<210> 6382
<211> 456
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-006-Q1-E1-D2

<400> 6382

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ggagtacgaa ggaaagactt ttgtgcctgg gcagtcgaac aatgcctaca ttttccttg 180
actcggcctc ggtcttgtga tctctggagc cgtccgtgtc cacgaggaca tgcttctcgc 240
cgcatcgaaa gcgctagctg atcaggccac acaggacaac ttcgagaagg gctccatctt 300
cccacccttc accagcatca gaaagatctc tgcgcacatc gctgcagccg tggctgcaaa 360
agcctacgag ctcggtctgg cgaccgtct gcctcncccc agcgacctgg tgaaatatgc 420
agagaactgc atgtacactc ccgtctaccg caacta 456

<210> 6383
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-D4

 <400> 6383

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 tcctcaaaga gatgtacaac gagtggccat tcttcagggt caccctggac ctgctggaga 180
 tggttttcgc caagggagac cccggcattg ccggcttgta tgacgagctg cttgtggcgg 240
 aagaactcaa gcccttttggg aagcagctca gggacaaata cgtggagaca cagcagcttc 300
 tcctccagat cgctgggcac aaggatattc ttgaaggcga tccattcctg aagcaagggc 360
 tggtgctgcg caacncctac natcacaccc tgaacgtgtt ccaggcctac acgctgaagc 420
 ggataaggga ccccaact 438

<210> 6384
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-D5

 <400> 6384

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 aggttcgtgt gcctgagggc gccggcggag gtgctcgcgg agaggggtgt gcggaggtcg 180
 gtggaagggg agcaacttcat gccggcgagc ctgctgcgga gccagctcga cctgctgcgg 240
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 cgcgacaccg tcgccctgtt cagggacgag ctacgggtgt cgtccggcgt cnetgcttga 360
 cttgtttctg gatgccaacg cgggtgcagtt tc 392

<210> 6385
 <211> 425
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-D7

<400> 6385

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 cacatgcccg gataagaacg ggggagccag tgcgactgga ggatgtcaag gattgggcta 180
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 ttgtaaccga gttcttttac agatccatga ccatatgggt attacggcca ctatgggtatt 360
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 ttcac 425

<210> 6386
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-D9

<400> 6386

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 cgacgccgac atccacgacg ccaacccgct ggcgcgccgc cacgagcggg tccccgtgca 240
 gcccatcggc gccgcgctg atcccgccgc ggagaaggcg gcgctgctgt tcggccttgc 300
 cgcggaaggg aaggacggcg gcgacgggc caaggtcgct gtcgacgcca gtaagctgga 360
 cctcctgttc ccggacgacg tggtcgaacc gt 392

<210> 6387
 <211> 399
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-E10

<400> 6387

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gtactctgaa taaggcatgc tcattttaag ttagcctagc gtgtcactat ggagtttctt 180

catgatgtca ccaatgccat gatgttgtca tcagtaacaa catgtgtcaa atgtcttaca 240

aacttgttca gactgaagtt caagttcacc aaccatgaga ccattatggt gaagggtgtg 300

ccactaactt gcagtaggta ctatacgagt ttttaaaggt agacctacag atgattgttt 360

tcagcattga cacattttgt atagttaaaa catgcattc 399

<210> 6388

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-E12

<400> 6388

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catccatcat cagtcaaaca tattgtcgca ttcaatgcaa cctggggttag ttgtctgtgt 180

ttgtactgat aagcgctgat atcatgggaa aacatctggt atagatgatt ccttcactcg 240

tctctaagac tctatatgtg agccgtatga tccatcctag cgtagcacct gtacgtctga 300

ttgcgttcaa ttcaactgct atagggtgat ttgcacagaa tttcgtact 349

<210> 6389

<211> 173

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-E3

<400> 6389

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catccgtcat cgatgcggcc tcaagtagca ggtcttcatt ggagaagtac aaggatgtcg 120
 agatgtgttt cacacgggga ttcaatgaac atcatgacga tcatggtcac gat 173

<210> 6390
 <211> 317
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-E4
 <400> 6390

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 ggacatagtt ggttatgcaa aacctgggtg aataattgct gtttctggaa tattggagga 120
 gcagggtgcca aaaatcaaag aagtttactc gaggtatttg gacagaatat tggatatccga 180
 aatggatggg tgggcctgtc ttcagggaac caggagagt tagaggaatt aagtatttca 240
 ccacgttgaa gaagggtttt gaccttacat gttttgacga ttaagagagg attaggtata 300
 taccctgtcg ttgcaac 317

<210> 6391
 <211> 323
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-E5
 <400> 6391

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 cagtcacgaa cacattgggtg atcttttcgtc gttgaccccc catgtacatg gtttttttgg 180
 agtgggatag ggatggcggg tgtgtttccc atggccattc tttgcacgtt atgaagctca 240
 tctgcaggat gctcgtaa atatatagaaat gttagtcaca acagatcacg tgtccatact 300
 gtatagcgaa acttaagatg ttg 323

<210> 6392
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B6

<400> 6392

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tagtctcggg gcagcggcgc tggcgctgct agtggcggcg gcgctgcctt cccagcagc 120
tggggtcaac gcgacggcgg tgctctcggc gttccccaac ttcgccgact tcgcgcggt 180
gctggcatcc actcccgtgg ccagcgagct ggccgggagg tcgtccctga cgctcctggc 240
cgtgccgaac gccaacctgc cgcagtcacc ttcggctttc gtagccggcg ccgccgccg 300
cgccgacatc gccgacgtgc tgaggtacca cgtcctgctg gactacctct cccgtccga 360
cctcgccgc cttccccct cccgggaagc tcgtgacgac gctgttccag accacgggcc 420
gtgcgcc 427

<210> 6393

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B7

<400> 6393

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ttctcgtact ccaccctcct cgccgcgctc acccgtgcgg gccacctcga ccacgcgctc 120
accttctgc cgctcatgga ggatgacgcc gtggctccgg acctgatcct cttctccaac 180
ctcattcacc tcgccctccg cgggtggcgac gcgccaagg cgctggcgct gttctcccg 240
ctgcgtgccg cggggatcag gcccgacctc aaggcataca acgcggccgt cgccgcctac 300
tgcaagtccg accttctccg cgacgccaag cggatgctgc tccacgacat gccggccgac 360
ggcgtcgcgc ccgacgcgga gacatactcc cccatcctcg cggcgctgg 409

<210> 6394

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B8

<400> 6394

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cagcatttct tgcgatgcat ttagcagctg gtgtgccagc tctaattgtcg gcacttgctt 120
tggcatacaa tgcaaacctc tttggagcac taacacacta tagtagcggg caatctgcag 180
tatacttttg agcgggggtat gttgaccttc cggatgtatt caagctgggt tttataacag 240
ccgcaatcaa tgctgtaatt tggggagttg ctggtgcatt atggtggaaa tttttgggtc 300
cttattgagt gtcggggcag tgtaagtacg tgaaaatcgt accatattaa caaac 355

<210> 6395

<211> 246

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B9

<400> 6395

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aaaaaaaaaa aaaaatggga ggcccatcaa agggaataca accttcctta agcgtgaaaag 120
caacgatctt taattcttcg tcagtggcac ttaattttca gttgactggc cgtgggtttta 180
ccctgtcctt gccggggtaa accctgttgt taccacctt acttgccctg catcagatcc 240
cccttt 246

<210> 6396

<211> 102

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C2

<400> 6396

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cgaaacaaag ccatataaat caaataccaa taaaaataca aa 102

<210> 6397

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C4

<400> 6397

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cttcgcgaag gctgggctgg attacgtttc ttgctccctt ttcaggggtc cgattgctag 120

gctagctgca gctcaggtgc ttgtctgagg ctgcctcctc attggcaacc ggattgcctg 180

ctgctggtgg atgtggtgat caacagtatt attacagagc catgctatgt gaacattact 240

agtagcagtg ctcataaaag ctacaatccc atgtcctttt tttccccagt catgtaaaac 300

ttccaaaactg ctccatgggt caaaactctg ttcttcaata catcatcaat tatcgattat 360

a 361

<210> 6398

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C6

<400> 6398

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ctggacagaa gtggcacgtc ttctacgcca ctgagtaccc agagcaacca atggttaacc 120

ttgagatgtg catgactggt ctggacaaga agaaagcttg tgtctttttc aagactaatg 180

ctgatgggaa cacaacatgt gccaaaggaa tgacaaagct ctctggcatc tctgaaatca 240

tccccgatat ggagatctgc gattttgact tcgaaccctg tggctactcc atgaatgcga 300

tccatggctc tgcattctcc acaatccatg tgacgcccga ggacgggttc agctacgcca 360

gttacgaagt tatgggcttg gatgccactg ctctgtctta tggtgacctt gtcaagaggg 420

tcct 424

<210> 6399

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B3

<400> 6399

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aaaaaaaaaa aaaaaaaaaat aaaaaaaaaata aataaaaaaaaa aaaaaaaaaa taaaaaaaaat 120
 aaaaaaagaaa aaaattttaat taaattaaaa aaaaaataat tttaaaaatt taaaaaatgg 180
 aaaaaaaaaa aaattaaaaa aaaagggggg gccctccaaa gggtttccct ttttttttcc 240
 ggttttatga attttaaggc ccttttaaat tgcccccaa attaatttcc tgggcgcttt 300
 ttttaaaagg ttttctcggg gaaaccctt gtttttcccc atttttatcc tttttaaaaa 360
 aacccttttt tcc 373

<210> 6400

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H8

<400> 6400

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 gtgcttcgca aggggtgcag cgacgcgtgc gtgctgcggc cgtgcctgca gtggatcgac 120
 ggcgccgagg cgcagggcca cgccaccgtc ttcgtcgcca agttcttcgg ccgcgccggc 180
 ctcatgtcct tctcaccgc cgtccccgag ccgcagcgcc cagcgggtgtt ccagtcgttg 240
 atgtacgagg cggccggggc gacgatcaac cctgtgagcg gcgccgtggg gctgctcggc 300
 gcgggcagct ggcagctgtg ccaggcggcg gtggagacgg tgcttcgggg cggcgccatc 360
 gggccgccgc ccgagttcga cggggggccgc gacaacacgt ttgctctggc ggccacggcg 420
 aagcgggccg tgggggtgc 438

<210> 6401

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A1

<400> 6401

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 gccacaagga actacatgac ccagagcctt ttgggccctt cgatgtctgt tagcgggtggc 120
 atcaatgtcc cagtgatgcg gaccccgctc tgtgctaatag ctccctgctga gaaaggaggc 180

aagaacttca tgategattt catgatgggc ggtgtttcag ctgctgtttc gaagactgct 240
gctgctccca tgcagcgtgt gaagctgctt attcagaacc aagatgagat gattaagtct 300
ggtaggctat cagagccgta caaggggtatt gttgactgct tcaaacgtac cattaaggat 360
gaggggtttct cttccttgtg gaggggtaac actgctaact 399

<210> 6402

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A10

<400> 6402

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cttcatacat tctggataga atcgattata ccatttcgtc atctgacttg tttgaagaac 120
tttggctctt ctttacagac atagaagggtg ctctcaaaga catcgaagggt cttcctttac 180
cgtttcgtca tctgcaatgt gcttatagta tgagagttgc ctgctaattc ctctaaatat 240
agcattagtt cagcttgtag cttcatatta catcaggtaa tggatggcat cagaactatt 300
ctctgtaatg atggtataag agctcacttg ctaattcttc tgaacattcc ctgggttcag 360
cttgtaactt tagttagatt aatggatatc atctaaacta ttcttttctt ttt 413

<210> 6403

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A12

<400> 6403

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tggttacta ccaggagggtg gactactgct cggaggagggt gaggtcgggtg gccccggccg 120
gcttcggccg ccacggcggc ggcgtccagc agcacgtcgt caaggagaag ttcgaggagg 180
tcgacacggt ctcacgcgcc ggcgcccaacc accaccacca ccatgggtcac cacggcggcc 240
acggcttcgt ggtgcgcgag accagggtcg aagaggacat caacacctgc accggcgagg 300
tccacgagcg cagggagagc ttctcgcga tggctaactg agccgcccgg cggccggcat 360

ccacgcccgt tcgtgcttgc ctgcgtgcc

389

<210> 6404

<211> 320

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A2

<400> 6404

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaggat ggggggccgc ttcaatgggt tcaaacttta 180

ttttccctta aaggtaattt attttctttt ttatttttta acttaatttc atttcatggg 240

ctttctttta aaaatttttg gaagggaaaa cccttgtttt aaccaaattt attccctttg 300

aaacaatttt ctttttccca 320

<210> 6405

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A3

<400> 6405

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cgccacgcg tccgcccacg cgccgcca cgcgctccgat tgaatttcatt attgtcacct 120

gaggtgagga atcaggacgc aatatttttg ctaagagggg tgagttcagg ggcacacgag 180

gtagcatggc aatggctgaa ggaaaactgg gattacatat tgggagccta ctctggaact 240

ctgctcacct atttcgtcaa cataactgtc tcgccactgg ccaccgatga acatggtgat 300

gaggcggagg agtttttcaa gagcagaacc aaggcgaaca tcgcgaggac tgtgaggcag 360

agcatcgaga ggggtgaggat caatgcccaa tgggtcaaga aca 403

<210> 6406

<211> 160

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A6

<400> 6406

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gggatgggaa gatcctctgc tgcgttgtct tgtctgtgct catccgtgtg tactgtgtaa 120
atatgaagat gtaataacaa aaacacgcat ttagctttc 160

<210> 6407

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B10

<400> 6407

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aaggatagtt catctgaagt gtcctacgag tactgtgtaa gggtggtcag gtggctggag 120
tgcgagggct acatcgagac aaacttcagg gtgaagtttc tcacatggtt tagcctgcgt 180
gccaccccgcc aggagagaaa gatagtcggt gtctatgtgg atacccttat tgaggaccct 240
gtcagccttt ctggccagct cgttgacagc ttctcggagg cggtatatag caaaaagcgg 300
acgccttctg gtttctgcat ggacctgtgg cattgaagca ccacaagcac ctaccgtttg 360
ctttgtacgg agcacacatt cggggccatt cttttgttgc 400

<210> 6408

<211> 326

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B11

<400> 6408

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cgaccttggc cacaaggata gttcatctga agtgcctac gagtactgtg taggggtggg 120
cacgtggctg gagtgcgacg gctagatcga gacatacttc agggatgatag tttctcacat 180
ggtttagcct gcgtgccacc ccgcaggaga caaacatagt ccctgtctat ctggataccc 240
ttagtgcccg accctgtcag gctttctggc cagctcgttc acagcttctc ggacgtcgtc 300

tataccataa acaggcacgc cttctg

326

<210> 6409

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B2

<400> 6409

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cgagaagaag gcaatggcgg ccgagagctt ctttttcacc tcggagtccg tgaacgaggg 120

gcaccccgac aagctgtgcg accaggtgtc ggacgccgtg cttgacgcat gcctcgcgca 180

ggaccccgac agcaaggtgg cctgcgagac ctgcaccaag accaacaatgg tgatggtggt 240

cggcgagatc acgaccaagg cgaccgtgga ctacgagaag atcgtgcgcg acacctgccg 300

cgagatcggg ttcacctccg acgacgtggg cctcgacgcc gaccgctgca aggtgctggt 360

gaacatcgag cagcagtcgc ccgacatcgc gcaaggcgtg cacgggcact tcacgaagcg 420

gcccgaggag atcggcgcgg gcgaacaggg ccacatgt 458

<210> 6410

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-G3

<400> 6410

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gacgtagaat gtttggtagt gatttacccc gatgaagtca atttggttct tcaatagttt 120

cttctctcct tctgtaaatt ttggcaaatt tggacctaaag atttggcgca tctggtgagg 180

atagtcacca aagaaaaagg gatccaagat cctgttttag catatatcat caagtgaagca 240

ttcaatcgtg aagacaaaaa gttagtcca atcgtaaaag ttagcatata tgatggaagg 300

ttactgaatc aattgatacc atggagcatc gaaagacaga gtcgggctta ctgccaagtg 360

gtcctctgtg atattcctg 379

<210> 6411

(1) The first part of the paper is devoted to the study of the asymptotic behavior of the solutions of the system (1.1) as $t \rightarrow \infty$. It is shown that the solutions of the system (1.1) are bounded and tend to zero as $t \rightarrow \infty$.

<400> 6411

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ctagtggttc	attatggatt	ttccaaatac	caaactgttt	ttttaatgtc	acgctaaagt	180
actagcacac	ttataatcct	aagaaacaat	atataaatac	aattgaattt	tattactctg	240
atccacatta	tgtcgcttta	gaatcagtga	cttagagggtg	gaacgcatat	gattcagttt	300
agctttttatg	agatgaggat	atacgtgaca	actcactttt	gagtcgtttg	ggatgacccg	360
ttct						364

<223> Clone ID: LIB189-005-Q1-E1-G7

<400> 6412

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ttcctcaaaa	gaacagccct	gcttctctgg	taggaacgca	gaagctgttc	aactgcagga	180
tactaatcac	tccctgtcag	atatgatcaa	catccgcaaa	gcttagaaaa	agcatacgaa	240
gttcacagat	cagtttgtaa	cctgtaatcc	ggtaatgata	cataatgaag	gttcagatat	300
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ca						362

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 ggttgggatc ttcaagtacc cgtgttgaga ttggtggaca tgaccgcacc ccggcatctt 180
 cagaacagcg agcggagagt catggaagga agcgtaagca aagtcagatt gctgggggttc 240
 ttgaggaata tttggattac aaaaggcaac ataatgataa gttgcttgat gtggtaaadc 300
 agattgatca acaagctgag ggatgtaaca agaaggaaga atattgtatt ggaaagtgtg 360
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<210> 6414

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H1

<400> 6414

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 cgcgccacc accaccgacg tggccgcccgt gttcgtgccg gacatctcgt ccccgagaa 180
 ccccttctgg tgctacgcca ccgccgctgg ccagccgccg acgaagcgcc gcaggagatg 240
 ttgaagtagg gaagatcgag attgtcttgt tcagtactgg agtggcgtag gcttgcaaga 300
 aaaaaacaca gttgctgtac tgtgtactcc catggtgacg tactatctat atactccatg 360
 tcgcagc 367

<210> 6415

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H3

<400> 6415

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ctccgtggac cagtccgacc agagctacct cgacgacggc cagatcgccg ccggctgggt 180
gctcacctgc caccgctacc ccacctctga cgtcgtcatc gagacgcaca aggaggagga 240
gctcaccggc gcataatcat tcatgcccac ccatctctat ctctgtgggt cgtcgttggt 300
tgtaatttga gtacgcgcgt acacgtactg cttttgtttc atttgagcac tgttcgtgta 360
agcgtcgagt tgccctgcca tcgtctctct cccctcaat ctcaacaatt tcggtgtgtg 420
cgcgcttcta tttt 434

<210> 6416
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-G11

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaagg gaaaaaaaaa aaaaagttaa aaaaaggggg ggccccctcaa 180
gggggttttaa tttttcttcc cttttcttgc aattttttat ttctttttaa ttttcccaa 240
atttcatttc aggggccttc tttttaaaac ttcttgccgg gaaaaccctt gggtttcccc 300
aatttaaccc ctttgcataa attccccctt tccccattgg gtttattttc aaaaaggccc 360
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<210> 6417
<211> 377
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E6

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agaagctgct caaggactgg gtggactgcg ccgtcttcga ccgccccatg gtgccgatgg 180
ggctgctgac ggcgcgccga gcgctcatcg ccgagtgtg cacacgccgc ccggaccgag 240

cggcgtcgtc gtcgtcttcc accagcagct ccaacccgct ccgggtgcgg aacggctgct 300
 cctgatcggg tgctctctc tccttcagac ctccgcctcc catcagcgag ctaggctgaa 360
 tcagcaagcc ttctttt 377

<210> 6418
 <211> 426
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-005-Q1-E1-E8

<400> 6418

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 gagatcctac ccttcaacta cagcaattat gccacagagc ttgagaatgg agcattgggc 180
 ataagtgaaa gagtacaggg aatgcctgtc agcttatcac ccctgcacaa gtcaatcaaa 240
 gagttcagaa aggcagttgc aaaagtggat tctgaattga aggctctaca gacatggaaa 300
 atttggcccc catggagaaa caaccctta aaggtcagag acatcaatga tcggttgatg 360
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 ctgatt 426

<210> 6419
 <211> 369
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F1

<400> 6419

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 atcaacgccc tggcacgcca gacgctcatc aacgccgacg gcatcttcga gcgcaccgtg 180
 ttccctgcaa agtacgcgct ggggatgtcc tccgacgtgt acaagagctg gaatttcaac 240
 gagcaggctc tcccagcaga cctcgtcaag agagggtgtg ctgtgccgga ccagtcgagc 300
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tggtgggcg

369

<210> 6420

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F12

<400> 6420

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gctcactcct tctaccgcg atggagctcg cccctgtcca aattcggttg cctctgtttc 120

cccctctctc tggttggtggc tggatccca tctccctgc gttggacggc tgccgcttcg 180

ttctcgtcgc tggcgttcgt cctgctcca gctagttctc atggccatgc ctctgttccc 240

taggtccgac ctgcgccgaag tccctaccta tcgctgctcg cccctctctg tctccgtgcy 300

agcagcagca cgatggggca cacctatgtc ctccacgcgc accagatgtt tgatggg 357

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<223> Clone ID: LIB189-005-Q1-E1-F3

<400> 6421

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attacgtctg aaaatgttgc ccatcgatat ggtgtaacca ggcaagagca agatcaggcc 120

gccgctgagt ctcataggag agctgctgca gccacggcct ctggaaaatt caaggatgag 180

atcgtcccgg tgccaacaaa gatcgttgat cctaaaactg gagaggagaa ggaagttgtg 240

atatcagttg atgatgggat taggccagg accacagcat ctggattggc gaaactgaaa 300

ccagttttta aaaaggatgg aactacaact gcaggcaatt ccagtcaagt gagtgatggt 360

gctggagctg tt 372

<210> 6422

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F7

<400> 6422

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cgttgtaaga ctttattccc ccgctttgct actgggttat taagtttggc gttattgttt 180
tcttgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggggg ggcccccaa aggttttaaaa 360
ctttatttcc ctgtgaagga actttaaac cctcccaaaa ggtcccaaaa aattaatttc 420
agggg 425

<210> 6423

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-G10

<400> 6423

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acaggcacct tccagaaggt tctgtccttg aacgaaagga tactgtcatc catgtccagg 180
aggtctgttg ctgcacaccc ttggcatgat ctggagatag gtccctggtgc tccaaccata 240
ttcaactgcy tcattgagat accaaggggc agcaaggta aatatgaact tgacaagaaa 300
actggactga tcaaggtgga ccgtgtgctg tattcatcag ttgtttaccc tcacaactat 360
ggattcattc ctgcacgct ttgtgaagac agtgatcctt tggatgtac 409

<210> 6424

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D1

<400> 6424

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 agcagatctc acgagattga cttgtttggc gagattggag gtttagcatt cagccctgac 180
 accgaggcct tctatgtggg ccttgccggac cagacgtacg gaggcattgat cgagttcagc 240
 aagaggcacc aacatcatta ctttaactcc ttgtggtgat aaccacctga gcggaaattt 300
 ggttgacacag ctgttggaac ccattgttgc attgtgtgct ccagaggagt gcatggtcct 360
 acag 364

<210> 6425
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-D10
 <400> 6425

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 ttggaaggt tcatactcca aatgggagcg ctacaccgtg gaagatgcac atgatattgt 120
 caactacgct aagaaaagag gtatcaatgt gatggcagaa attgacgtgc ctggatcatgc 180
 agaatcatgg ggaaatggat acccaaagct ctggccttct cccatttgta cagagccatt 240
 agatgtctct agtgatttca catttgaagt aatttttggg attttgtctg atatgaggaa 300
 aatctttcca ttcgggctgt ttcacttggg tggatgatga gtatacacag ggtgctggaa 360
 cacaacgcct cacgtgcggc agtggatgga cgagcgcaaa atgaccacg 409

<210> 6426
 <211> 325
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-D11
 <400> 6426

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 ctctagaggt tggttacttc atttctcagg catgcaaggt tataacgtgt tccttctttt 180

aagttttctt attttaattg gctgtcggtt tacattcata tctcttggtt aggtcctgcc 240
gttttaaac taaggccctt tgttttaaac ctttttttcg gtaacaccct tgttttttcc 300
aaagggttagc ccctttgttt ctccc 325

<210> 6427
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D2

<400> 6427

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tcttagccgg ccgctggggc gcgccccgcg cctctccgct ccgcgcgctc ccgccccgct 180
gcgtcaccgt cgtctgcagc agcgccgcgg cggcagccga ggctcggac gccgcagcgc 240
cagtggagaa gttccggctc gacaatttgg ggccccagaa ggggtcccgc cggcggccca 300
agcgtaaggg acgcggtatt gctgcaggcc aaggcgcgag ctgcgggttc ggtatgcgcg 360
ggcagaaatc gcgctcgggg cccgggggtcc gggccccggtt ctcagggagg gcagatgccg 420
ctctaccgcc gtctccc 437

<210> 6428
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D4

<400> 6428

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cctgcggcct ccgcccgtcc gcggctctgc ctcttctctc gcttctcctt gccccgcgtg 120
cgcgacgaac gccgcccgtt ccgccttaag agtcttcgtc ggacctccg tcaggattct 180
tcggggccct tcgcccgcga cgatctgacg tgacgatgtc tggtcatacc caacctgaag 240
gaccacgcca acttgattca aaacatgctg tgaattcatg ccgaaagaat gtaccggta 300
catcgttcgt ctcagatttg agggatcaca tccacgagtt catcaatgca tctgcagatg 360

aacaccggac atgcttcaca aagactctca aaaaggatgt tcattatgtc aaagactgtc 420
actgatagat cctc 434

<210> 6429
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D7

<400> 6429

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ccgaggagag cagcgatgac ttggctaacc caccgaaggt agaggagaag cttggtgctg 180
tccctcatgg cctgtccacc gactctgagg ttgccagag ggaagccgag tctatctcta 240
ggaagactct caggagctca gccgagaagt ttgagttcca agctgagggt tccagactca 300
tggacatcat catcaactca ctctacagca acaaggatat cttcctgagg gagctcatat 360
ctaatagcctc tgatgctgga taag 384

<210> 6430
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E11

<400> 6430

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ggattcagca gttgctggct gcggagcagg aggctcagca aattgtgaat gcggctagag 180
ctgctaagtc agcaaggctt aggcaagcga aagaggaggc agagagggaa atagccgaat 240
accgtgcccga gatggaggct gagttccaga ggaaggctgc agagagcagt ggtgactctg 300
gtgcgaacgt caagcgtctc gaggaagaga caacggcgaa aatcgaacag ctcaaccagc 360
aggctgcaag catctcccca gatgt 385

<210> 6431
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-E2

 <400> 6431

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 ggacaaggag ggcatacctc ctgaccagca gcggcttata ttcgctggca agcagcttga 120
 ggacggacgc acacttgctg actacaacat ccagaaggag tcaaccctcc acttggtgct 180
 gcgccttagg ggaggcatgc agatctttgt caagaccttg actggcaaga caatcacctt 240
 tgagggtggag tcctcagaca ccattgacaa tgtcaaggca aagatccagg acaaggaggg 300
 catcccacct gaccagcaac gtctcatctt tgccggcaag cagttggagg atgggaggac 360
 ccttgctgac tacaacatcc agaaggagag caccctccac ttggtgctgc gtcttagggg 420
 tggatatgc 428

<210> 6432
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-E3

 <400> 6432

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 ggcgtgggtcg tcgctccaga ggataccgac gccaccgcag ccgccgcggg agcgcgcagg 180
 tgggtccgtg acgagggacc tcagcaagaa cttcttggac tcccacggct gccagcaggc 240
 cagcggctgg gaggggtggac acatgctagg ccaccggcga gccgtgcatg cgctggagct 300
 tcacaaggtc ggagcttgtt gaagagggaa gagagaaaat ctagcttagc tgcagtgagc 360
 ttgttcggga gaaatat 377

<210> 6433
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E4

<400> 6433

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cagcgggtgga gttgtccctg gatggaggag aagatgccgc cgcattggcca tggcgcgcgc 180
ggccaccgcg gatgctgcgg cgcccgccca cacctccgat tccctcatcc tctacttcaa 240
ggcggaggggc accatggagg agagggccat tccaagatc acagaatctc ttgagggtat 300
ggaggagtc aaggacctgg aggtgctcat tgaagaaggc atcggaagtg ttgtgttaac 360
aaaggagaca actgtgcaag ctactggaat aacctcaaac ctggtggaag ctatccaggg 420
agctgggttc aag 433

<210> 6434

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C9

<400> 6434

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agatgccctg cccctgcgcg gggctgcagg gcttgtacgg cgctggcgcc ggctgacga 180
cgatgatggg cgccggcggg ctgtaccct acgcggagta cctgaggcag ccgcagtga 240
gcccgtggc ggcggcgccc tactacgccg ggtgtgggca gccgagcgcc atgttccagc 300
cgctccggca acagtgtgc cagcagcaga tgaggatgat ggacgtgcag tccgtcgcgc 360
agcagctgca gatgatgatg cag 383

<210> 6435

<211> 54

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B3

<400> 6435

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54

<210> 6436
<211> 370
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-005-Q1-E1-B4

<400> 6436

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cctctgcacg ccctcaacct ccgtgttccg cggcctccgg gcgcccgcac ccgccgcgcc 180
ggccccgcgc cggcgccgct cggcggcgct caggggcata gtctgcggca aggtacgtgg 240
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tggtagccgt ggtcgtctcc tcgttgaggc tcgccaaggc cagcgtgccg ccgaacttca 360
ccctcaagga 370

<210> 6437
<211> 365
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B5

<400> 6437

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cgatactcgg agatgaactt tggccagtga acatagtgat gatagtaaata cagtgagggt 180
tcattggagc tttggatcca agtaagactt gtgcaagaga ccctggcctt accaagtgct 240
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acaat 365

<210> 6438

<211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-B6

 <400> 6438

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 gatgatgagg acgagcttga caattccagt ggagacaggc ataatggtgt gcagagggct 180
 ggtatgttgt cagaggggtca tcccgaatg tcatttatag atcatgatca acagacgttg 240
 aagctagatg cagatgcaca agatgactct tgcacatcat ttgaggctca tcaggttggg 300
 tgcgatggtg gggcacatac tgatattggc aatcactaca ggagtgcga cggcctttgt 360
 ggtggtgcag aaca 374

<210> 6439
 <211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-B8

 <400> 6439

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 aggttgacgg aggagagggg gcctcgaaga tggtccggaa ccagtacgac accgacgtga 180
 cgacatggag cccccagggg cggctgttcc aggtggagta cgccatggaa gccgtcaagc 240
 atggctcccc ctgcgtcggg ctccggtcga gcatccatgc ccgtcttagc cgccgtcaac 300
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<210> 6440
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 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-C1

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 ctccggcttc gacgtcccgg acatggatct cgctagcttc gcggcggaca tggagagcct 240
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 gaaaag 366

<210> 6441
 <211> 400
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-C11
 <400> 6441

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 ggctcgtggt tcggcgacta cgggttcgac ccgttcggtc tcgggaagcc cgtggagtac 300
 ctgcagttcg agttggactc gctggaccag aacctggcca agaatagggc cggcggcatc 360
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<210> 6442
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-C2
 <400> 6442

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 acgcgcccga cagcgccccg gcgctcgcca tcaacgccac catcgagaag accaagcgcc 120
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tcgtcagcgg cgaccagcgg cactggggcg agttcgtcac cccgggcctg ctcttcctct 240
 acatcgccgg ctggatcggg tgggtcggca ggagctacct catcgccatc agcggcgaga 300
 agaagcccg ccatgagggag atcatcatcg acgtcgagct cgccacccgc ctccctcccca 360
 ggggggttc 368

<210> 6443
 <211> 341
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C3

<400> 6443

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 tcccccggtg ggccgcgtcc ctccccgcc ctttttaaca ataccccgag gccttgcggg 180
 tccgcgtaaa gcacatcgcg aaaagatccc ccaagccagc ctccctaaatc cctccacccg 240
 ccatctccga cccgcggagc cgctcctcg cgccgcctt cgccggggcg tgcccgccgc 300
 ttgtggccgt ggccgcaatg ttcggggtea actccggcct c 341

<210> 6444
 <211> 356
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C4

<400> 6444

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 ggagtggcaa aagcactggg accagactgc tccatacaac aagctgctgg tgtatgagtt 180
 ctacgaaaag aattcctcgc tgtgcaaggc catggacaag ccgttcgaga agctcgccac 240
 gcagtacaaa ggcagggccg acttctgcaa gctggacgtg gacaactttg agcttttggc 300
 gcggatttgc ggagtggagg gagcgtatcc gacgttcgtg ctgttcaaga aatgcg 356

<210> 6445

<211> 442
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-005-Q1-E1-C7

 <400> 6445

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cgatgtctag cgttgtcccn nctgaagatc cnacgacatc ctcaatctcg ccttcacatg 240
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gggttcaatg ttcatacttt gtactaatct gctttgtctc cgnaaaacga gaaaaaaaaaag 360
ggcaattgga cgggtgtaaca taatgaaatg ctatcttggg tgataactaa aattttctaa 420
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<210> 6446
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-B2

 <400> 6446

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tcgcggcgca gcggatcacc gccacgggccc gtcgcaagac ggccatcgcc cgcgtcgtgc 360
tccaggaggg caccggcaag gttctcatca accttcgcaa cgctaaggag tatctgcagg 420
gaaatccaat gtggat 436
  
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<210> 6447
 <211> 417

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-H7

 <400> 6447

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 gtgtgctgct gctcccatga gaaatataat agcgtatgtt atgttgatgc atatatatgc 360
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<210> 6448
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-H9

 <400> 6448

 acccacgcgt ccgcccacgc gtccgggagg taaatcctgt gagatttaga tgagaagaaa 60
 gcttttagcga ggcgcttgcc aagtgccttg tgaatcacct caaccggatg tggttgtcga 120
 tctcgcggag tcgagtcgag tttagtcgtg gtacgctaga tgattatgcg agctgaagga 180
 catggatcag agcaaaccag tattgggtgga ttaatcttgt ggatgcatca agccagcacc 240
 agaatggaag atgctcacca agtggtcgtc aattaacaac actaacgtag tgtttatccc 300
 aggattataa gtttgttctg ttgtggatgg tgctaagtgc cgggtgggctc ggccttctta 360
 tataagtata tcacatcttt agcttcttta ttgaggactg tcacttaagc tagcatgtat 420
 tt 422

<210> 6449
 <211> 110
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-A1

<400> 6449

ccacgcgata agcggacgcg tgggcagacg cgttggctga agtgtgggtt gaggcgtggt 60
cggtgaaggg gtacatgatt tggatagatt tagccatgta atcatcgatt 110

<210> 6450

<211> 210

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-A11

<400> 6450

tccaggaagc agctgacttt gacaaccctg tgggaagcag caactatgaa gcctcttgtg 60
tcagtctttg tatggcggct gatgtttctt ctttctgtgt cgtatgagta tgttttgtcc 120
tagtagattg tatcaggagt ttttcagttc aaattgagct gcgcatgttc ttttgaaaaa 180
aaaacaaagc aaaaaggaaa caaagtaaaa 210

<210> 6451

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-A12

<400> 6451

at ttggcgat tccgatgagg actgatgtaa tgacatctta ctgatttttc atccctgctg 60
acggaagctt gatttctccg ttggtgatgc tatggatgta atcagatcag ccatttgcaa 120
gctgattgct gccacggatg agtattgtgg cagcgggcaa tcccaaaata tagctctctt 180
gttatagggt agtttattat gagtagcatt cggcttatgt ttttctggac cgtccccatt 240
atgcataagc ttgggctgct tggctgtatg taataataag caacattctg cttattatga 300
tttgattctt cttggaggct tagtttggaa acttaaatcc tctccgatat ttccaaaaaa 360
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggggggggc 420
c 421

<210> 6452

<211> 373

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-A4

<400> 6452

gtgaatagca ggagagagct tccagtagac ctggctgaag gaaatctcaa agctctaagc 60
 ctccaagccc tgggtcaggg ggttgacatg cagcttggtt tggctattga tagtccaaag 120
 gccacttttag cagtaaaacg gcgcttagcc tgtgagatgg tcaaattattg gcaacaagtt 180
 caagagagca ttccagagct tcctatctct gatggatggg gtaaaaagca ccggctcttt 240
 ataaagtgga aatatgttga agctaagggtg tataatctat gctactacca tcattctttt 300
 taacttcaaa ttcttgcccta agtatcaaac atgctaaatt ttcttcagat ggtatatattc 360
 tctaattgtgt gat 373

<210> 6453
 <211> 171
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B1

<400> 6453

cggacgcgtg ggcaaactga cggcgtgtac agattttcat gtccggcaac gctggttgag 60
 actagaaaac tcgttgcggt atgtagataa agccaggggtg tcattcatgtg ttcgctgggtg 120
 taatggagca gattagcttg gtaattaatg agacattgca tttcttaact t 171

<210> 6454
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B12

<400> 6454

accacgcat ccgcaccgga ccgcggtctc tccacgccct cctcggcggc ggtgcagttg 60
 ccgacttgct gctgtggcga cggaggaatg cctcggcggc agccgtgggtg ggcgccacca 120
 cggctctggtt cgtcttcgag cgcgcgggggt acagcttccc ctccgtcctc tccaacgccc 180
 tgctcctcct cgtcgccatc ctcttcttct gggccaagtc tgcgttgctg ctcaacaggc 240

ctgacgggca agcaccgccg ggcg

444

<210> 6457

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G4

<400> 6457

cgctccgaaca cgcgtccgca gacgcgtggg gattcttgaa gagatcgagc ttcttttgca 60

ccacaaggtc caggatgtct tgcaactgcg gatcaagctg cggctgcggc tcaagctgca 120

agtgcggcaa gaagtaccct gacctgaagg agacgagcac cgccgcgcag gccaccgtcg 180

tctctggcgt ggccccggag aagaaggccg cgcccagatt cgtcgaggcc gcggcggagt 240

ccggcgaggc cgcccacggc tgcagctgca gtggcaactg caagtgcgac ccctgcaact 300

gctgatcaca tcgatcgacg accatggata tgattattag ctatctagct tgtgggtggtg 360

gttgaacaat aataagcgat gccgagctgg ctgccataca tatgtactgt gtgggtgtgtg 420

tgacagagag agacaca 437

<210> 6458

<211> 318

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G5

<400> 6458

cccacgcgtc cgcattcttca agccagccgt ctccttatcc ctgcgacgcc gtcacctag 60

gtcattcttc cagccgcctt ctccaccag cagcagagca caccatctc tccactcgga 120

tccccaagcc ctgcctcca tctcttgcca cgacatctgt tcctgctcg aatctccaac 180

cgggcgcgtt ctgcgcggtt ggcaacggcg ctggaatgcc ctttccaacg gtcggccttg 240

gaacggtttc tcgaaccgcc taattcaacc tcgccaatct ttgggtcaac ccctttctca 300

acgccgtcgc tgagctcg 318

<210> 6459

<211> 414

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-G9

 <400> 6459

 actcgtgtcc aggttcccca aggacaccag cgcgtccttc acgctacgcg accccgccga 60
 ggtcaaggag ttcctgcgca agctcgtcgg cgccaacgac gacagctgat gatccggccc 120
 gcgattcgtt tccctttccc gccgtgacca gctccgatcc gcctgtgtca agccgctaac 180
 tcaacctcgg ctaactaact ggtggaccgg caaaaggctt ccttgggtgtt gcaactggat 240
 ctccaaccaa caacctgcct tgggaacagg acaggcctta cctattatat aattaaacc 300
 ctttgggtacc tccgtttttt ttgggggtcca catctctcgt gtacaacatg catgcctgct 360
 gttgtttacc atttgcctcg gctgaaaagg cttgtatttt cggcgccctt cccg 414

<210> 6460
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-H1

 <400> 6460

 gcgtccggac gtagccgtcg ccgctcggca aaccaagcag ccaagagcag agtacggctt 60
 cgtcacgctt gcatccctac ggggttcgggg acgcgccgtg cttcagccgc acggcgttct 120
 cacaatgatg gcgatgatga ataaataaat ttatacatgg atcgagcttt tctccttctg 180
 gcagcaatgg gggttttctc gctcgtggag gtggaggag agtaagaacc cgtgaaagcc 240
 atcgtcgcc acggtcagac tctgattggc agttgcaatt gctttggact gcggctgcag 300
 ggatgaaaga aggtgacgtg ggaagataga ccacaagggg cacgtattcg cctaaaatct 360
 ccacccaadaa ggggtgtttg tttga 385

<210> 6461
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-H11

<400> 6461

ggctaacctc cttttttctc tctctatctt tctctccatc tgtggacttc tccggttttg 60

tttgacgaga tgcctgcgct cgccgtcgac gccgcgacac ccgtggcgca cgccttcgcg 120

tcttgcgacg cggcgcgctt ccccgccccg cccgtggtgg gccccgccgc cgcggccgag 180

gccgccccct ggctcgccga cctctccgcg gcgctctaca acgtggacgg ctggggcgcg 240

ccctacttct tcgtcaacga cgacggcgac gtggccgtgc gcccgacgg cgccgcgact 300

ctcccgggcc aggagatcga cctggccaag gtcgtggcca aggccgcggg cccgcgcgcc 360

ggaggcgggc tcggcctgcc gctgccgctg ctctgtcgct tcnccgacgt cct 413

<210> 6462

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-H2

<400> 6462

gtccgcatac gagtccgcct cacttattac gaacccccctc tgtgccactg cccactgccca 60

cctgaaatcc ccgcgaacct atacttttcc ttccccgat ccaggcggtt ctcttcccag 120

aagccagccc agaatggcgg catccgacgc gctgcagtcc atcgtttaca gccgtgggtc 180

gctccgcctc ctcgatcaga ggaagctgcc gctcgagatg gagtacatcg acgtcaagag 240

ttccgccgat ggctggaatg caataagaga catggttgtc cgtggtgctc cagcaatagc 300

catagcagcg gcactagcat tagccgttga agtttctgat ttagatttta ttggtacgcc 360

tgaagaagca gcttcttttg tttcaaagaa attggaatac cttgtatcca gcccgacaac 420

tgcagttgaa ctatctgatg 440

<210> 6463

<211> 65

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-H4

<400> 6463

acgcgtcacg aaaaaaaaaa aaaaaaaaaa aacaagagga aagaacaaag ggagggttca 60

taaaa

65

<210> 6464
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E6

<400> 6464

gggccaccca cgcacccgac cagcggtccg ggactcgcct ccacgggtcc accatgtatc 60
ccaaggcggc agacgaaggt ggcgagccgc tggccacggg catccccctc agcggcggcg 120
gcggtacta ccaggcgggc ggcgcgatgg cggcggcggt cgcggtgcag ggcgagccgc 180
ccgtcgccgc ctgggtccacc gggctctgca actgcttcga cgactgccac aactgctgcg 240
tgacgtgcgt gtgcccgtgc atcacgttcg ggcagaccgc ggagatcatc gaccggggct 300
ccacgtcctg cggcaccagc ggggcgctgt acgcgctcgt catgctgctc accggctgtc 360
agtgcgtcta ctctgcttc taccgcgcca agatgcgcgc gcagtacggc ctccaggtga 420
gcccctgctc cgactgctgc gtgcac 446

<210> 6465
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E7

<400> 6465

cacacaagca cttcgacgtc gcacggggcg tgcacacaga cacaccaagc gtcggcacca 60
atggcttact accaggaggt ggactactgc tcggaggagg tgaggtcggt ggccccggcc 120
ggcttcggcc gccacggagg cggcggtccag cagcacgtcg tcaaggagaa gttcgaggag 180
gtcgacacgg tctcacgcgc cggcgccaac caccaccacc accacatgg tcaccacggc 240
ggccacggct tcgtggtgcg cgagaccatg gtcgaggagg acatcaaac ctgcaccggc 300
gaggtcacg agcgcaggga gagcttctc gccagggcta actgagccgc ccggcggccg 360
gcatccacgc ccgttcgtgc ctgcctgcgt gccttacgta tgtctgtggt tgact 415

<210> 6466

<211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-F1

 <400> 6466

 acgcgtccgc atggatggtg gagcgcggcg cggggcatgc gtgcaagtgc aaccaatcgc 60
 ctcgtcgtgc gctcgccttt gcttcctcgc ttaacgtgag taacctcggt ggctgatcaa 120
 ggctttgacg gcggcaccaa cgcttcttccc tcgccgcctc gttgcgtccg cccgcccagc 180
 gcccaactcgt acataacccc ccaccgcgta cagcgctccc tctcgcgccc cgcggtgagc 240
 taccctcgct cgcttttagc taaccaacca acaaggccct cccgccgtcc tcctccccgt 300
 cgtcgtcttc cgccgcgtta acgcaacca cgcccctggc actgcaactc ccgaccaaag 360
 cgcccgcccg cctcccgtg cctccccttc cgcgcgccgc actcccggcc gcgccggcgc 420
 ctcggcattg cgcgcac 437

<210> 6467
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-F11

 <400> 6467

 acggacgcgt gggcgacaag gagatcctca tgatcgtgaa ggagaacttc gacttcaggc 60
 ccgggatgat cagcatcaac ctcgacctga agaagggcgg caacagggttc atcaagaccg 120
 ccgcctacgg ccacttcggc cgtgacgacg ccgacttcac ctgggaggtg gtgaagcccc 180
 tcaagttcga caaggcatcg gcttaagggtt gggactgtca ctgtggacat gaggactacc 240
 ttcctctggc tctgctgtta cctgcaagca ttgctgctgc tggatgtgtg tgtttgatca 300
 gtgactggct gctgctccat agaagatgaa cggagagaag gatgatgaag ggctttggca 360
 atcgccgctg caactgcaac ccatgccatg ccggcttagt gattgggtaa aattgggc 418

<210> 6468
 <211> 172
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F2

<400> 6468

gcgtccgaag acacgtgggt tggcagttta gccacccgtg gcagtagtgc ttgttgcttt 60
cacaagaaat tagcaaatac cccacccgat tacaagcgtt gagtaataga aaaataaaag 120
atatacaaaag aagaacaaaa atacaaaaat cggaaagtaa aaataatata aa 172

<210> 6469

<211> 358

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-004-Q1-E1-F4

<400> 6469

ggtccacatt acgggtccag cacgcgtccg cacacacgtc cgccgaggag cccgccgcgg 60
ccgaaccggc cgccgaggcg gaggtctgtg ctctgtctgg tcccgaggag actcccgcgg 120
ccgaacaaga agcaaccgcc gaagaagaag ctgctctctc tgctggtgcc gaagaaccgc 180
ccgccgccga gcctgtcgcc gaagcagaag ctgctgtctt ccaggagctc gccgcggacg 240
aaccggaggc tctgtctctt gctgggtccc aangagccgg ccgccgaggc ggaggctgct 300
gctcttgagg agcccagaaa ggccancgag tgaggccgtg cgcacgcagc ggcggcgg 358

<210> 6470

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F5

<400> 6470

aagaaaaaaa aaaaagaaag agtaaataat aaaacaggat attctgtttc ataattctga 60
aatagagttc ttttttttag tattactcct cattaggatg tatatattaa tcctcctatt 120
ttaatatata ttaatcatcc tattttaatt aggttctaata ccaattagta gtaagtattt 180
tcttttttat ttaatagtct ctgactatca ttaaataaaag ggtagagcaa ttcttttttt 240
ctagagattc tagagaaagt gagacaaagt gaagcgaaag agttttcttt gtataagaat 300
taggtctata tcatatctaa atagaaggga aatcaaaaag aagggaagtg gggattacat 360

tggatgaatc cttaaggaag acatatcaca aaagaaataa aggctaaagt aagcggtcct 420
 tgcctttgg 429

<210> 6471
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-G1

 <400> 6471

ggggtccagca cgcgtccgga ggcagccctt tttttttttt tttttttttt ttgagtactg 60
 tcaaaaactgg tgtgatttat aacagtaaag attacgagca gtgttttacg gttctatctg 120
 caaaaaaaaa aaaaattaca gctagtctgt gctttacaac tgctgcatca ttgtcctcgc 180
 cagctaccgg ttaccctcgc catcccaatc ctaggccgca tcttcgccgt gcatgggttc 240
 ggacggcgag ctgacctcct tcacccccga tctcttcttg gccttctgtg cccagcccag 300
 cagccctgc tgcacatgct cgttgaaaat ctccttcttg tagtagctcc ccatctgggt 360
 aacaattgca taaagcggga gcgtgctgta gctgc 395

<210> 6472
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-D11

 <400> 6472

cccacgcgtc cgacgagcga cgaagcgcgc acaaagagaa gaacctcgga gctgagatgg 60
 cacaagccat ggcgtcgatg acaggectct cgcagggcgt cctgcccagc aggcgcgccg 120
 acagcagaac caggacggcc gtcgtcgtcg tcagggcgtc cgcgaggagg gacgccgttg 180
 cgcaggcggg ccgccgcgcc gtgatcgggc ttgtggccac tggcatcgtc ggcggcgcct 240
 tgtcgcaggc ggcgcgcgcc gagaccgtca agaccatcaa gattggagcc ccgccgccgc 300
 cctccggtgg actccccggg actctcaact ctgaccaggc gagggacttc gacctcccct 360
 tgaaggagcg gttctacctg cagccgctgc cgccggccga ggccgcggca 410

<210> 6473
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-D12

 <400> 6473

 acggggccaat tatatcccggt tgaaatacaa tacagaagaa gtttaaggta tcttcaacac 60
 agctcctgta ctagtcatgc ccataccggg cattgacgtt gttccttgct ggtccattcc 120
 tcgatggatt ttgactaac caaaatgtct ttgctttcga ctacacaact caagttctgt 180
 ttttcatcat gctgtcgtgc ctgatttcag tctcggtgaa cttcagcact tttctcgtga 240
 tcgggaagac gtctcctgta acctacaaag tacttggcca tctgaaaaca tgcttgggtcc 300
 tcacctttgg ctatgtcctg cttcagcacc tatttagctg gagaaacata cttgggatcc 360
 taatcgtggt aattgggatg gttctgtact tgtacttctg cactanagag actc 414

<210> 6474
 <211> 174
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-D2

 <400> 6474

 cgtccgaatc caagtttctc tatttctctg atcctcatca gttaacatca agcttatcac 60
 actggttaga tagtctccac ctccaccttc ctgtctacct tcgccagtag gtctgaggca 120
 tgcgataacc tgctcatcgc gtgccgtcct tccagaagat catcatgttc ttgc 174

<210> 6475
 <211> 208
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-D3

 <400> 6475

 ggggtccagca cgcgtccgca cacacgtccg cttttgacga tctcccatat gacctaaaat 60
 catgcttcct ctacttttgc ggcattgccca atgaaaaccc cggttaaggc tcccaaattg 120

gaatccagtt ggatggaaaa ggggttccta aaaccaaaga atgggaaaac aatggaaaaa 180
gttggaagaa tcaatttgaa ggatttgg 208

<210> 6476
<211> 475
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D4

<400> 6476

ggtcgacatt acgggtccag cacgcgtccg gctgcacctt acccatcagc caagagcccc 60
atggagagca gtgacacgtt tggcagtggg agcgccaacg acaagtcac atgcacagac 120
attgccctct caagcaacca tgaggagtcc ctatgttttag ggcagcccag gaacatcagc 180
ttcatccaag agtctcccag tacaaaacta cagatctgat ctgaatatct gatcatgccc 240
aatgttcata gatttgtcca ggctgactga tgcaaggacc atacgatact tttgcattca 300
ggcaaggact cgagaggaag agattacgta tgttatcggt gccgctagct gttgtttatg 360
atgatgtttt gctgtgccag tttactgtga tgctgggtggg gcccccaact atactaacia 420
gagagctgtc acttgcaaac tcctgaattt tttttttgcc caacgccaat tcctt 475

<210> 6477
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D8

<400> 6477

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ctgattatcc tttcaaacca ccaaaggtgg catttcgcac taaggtgttc catcaaaca 120
tcaacagcaa cgggagcatt tgccctcgaca tcttgaagga acagttgaat tcggcactaa 180
ccatctccaa agtgtgtgtg tccatctgtt cctgtgtgac tgattcgaaa cccgacgaac 240
ctttgggccc ccaaataact caaatgttca agaccggccg gcacaagttc gaaaacaccg 300
ccaggacctg gaccagaag tatgccaagt agtaatttcc ctacctggcc tttggggtct 360
ctgctgc 367

<210> 6478
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E1

<400> 6478

gggtccagcc cgcgctccgca cacacgtccg atctgatcta ctgatctatt gagaggaacg 60
gggaaacaca cctttgttgt tgttgctatc ttcataccgt cgccctgtag agaagcaaca 120
gggcattggg atccaagccg ctgtaggttg tcgcgtttcc aaacactccg acgcctaggc 180
gatggggggc tctgaggact agggtttttag ggcgaggtac tagcgttagt ctttcctgcg 240
acccttagt cctatatata gcgctcgttg tctgggggct ccaaccgagg ttagcgtggg 300
ccctcccaat caagggccca tttaaagaga tagatagttg ggtttagccc aatccggtca 360
cagttgacca gctgtagagg acacacccaa cac 393

<210> 6479
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E10

<400> 6479

agtcaggaat ctctcccttg tctacactct tgctggagtg gattgcattg attgtgcagc 60
agatgcatct gtggtgggag cagtgaatga aggtattgaa gtagcagcat caattgtacc 120
aacagttcaa aggccttggc tgatgattag tgtaaatgat gattgcagag atcttcattt 180
ccgtaaagct gagtttgatc ctgatgattg cccactggat tgctcaaagc catgtgagaa 240
agtttgccca gctgatgcaa tatcactaaa gcattccatg gttgatggag agcgcacact 300
atctgatccc ttacgtggta aatatgaggg tgggtgaatt actgagcggg gctatggatg 360
tggtcgggtg ttgccagttt gcccgatatga cagaataaga gctg 404

<210> 6480
<211> 420
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-004-Q1-E1-E11

<400> 6480

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agaccgtggg caagcccaag gtggcggcgt ccggcagccc ctggtacggc cccgaccgcy 120
tcaagtacct cggccccctt tccggcgagc ccccgagcta cctcacggc gagttccccg 180
gcgactacgg ctgggacacc gccgggctgt ccgccgaccc cgagaccttc gccaagaacc 240
gcgagctgga ggtgatccac tcccgtggg ccatgctcgg cgcgctcggc tgcgtcttcc 300
ccgagctgct ctncgcgaac ggcgtcaagt tcggcgaggc cgtctgggtc aaggccggct 360
cccagatctt cagcgagggc gggctggact acctcggcaa cccagcctg atccacgcgc 420

<210> 6481
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E12

<400> 6481

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ttttcaaaag ctggaaatct cattcacaga ggaggagata tgtgatctct ttgaagcttg 180
cgatataaat gaagatatgg gcatgaagtt caacgagttc attgtctttc tgtgccttgt 240
ctatcttctc aatgaagcag ctgtcttgga agcaaagata aagatgggac taggaaatct 300
tgaggcaacc ttcgagacct tgggtgatgc gtttgtcttc ttggataaga ataaagatgg 360
gtatgtgagc aaggatgaaa tgatccaagc aataaacgag aacacgaca 409

<210> 6482
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E3

<400> 6482

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acgaaaaact ccgatggagc tcaaaaacga aaaattccga ccacaatttt cctcgaggac 180
ataaccgcaa aaggacgaaa aatggaccaa tcaggaagaa gaaagaaaaa aggacatttc 240
aggacatcag gacttctggg aacttcaaaa aatttaggga aattcaaatt gagatttatt 300
aagatttcgg tctcccctgc agaagaccat taataacgcc ttctgagggc cccgcaccct 360
cgaaaacgct ttttgccctc gccctacaa gaaaattacc tcccagacgt catttattaa 420
aagccagccg gtgta 435

<210> 6483
<211> 432
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-004-Q1-E1-E4
<400> 6483

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agaggatgag tgaccccaag tacgcctacc cctaaccgcg gcaaggttac taccaagggc 180
cgtatcacgg gccgccggtg atggcgccgc cgcagtacgc cgcgccgccc cncagaaggg 240
agccgagctt cctgaaaggc tgccctggccg cgctgtgctg ctgctgcttg atcgacgagt 300
gctgctgcga cccgtccatc atcttcgtca gctagactag acgaggaaga acctattggt 360
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cagatgatct gt 432

<210> 6484
<211> 290
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-004-Q1-E1-B5
<400> 6484

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tatactgctg gtacatgtgt cgtgtgatag atgtgtcaac tatatatcaa tctcgtcgcc 120
ggcagctctg gcatgtttga gtatgtgttg cttctctgtg gtgccggcga cgatggctgc 180
tagtactgtt aatgtgatcg ggtctccttg aacaatggca taaatatgtt gcttgtttta 240
aaaaaacat gatggcaaac tcagtggtaa aagccggact aaggaacaag 290

<210> 6485
<211> 321
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-004-Q1-E1-B7
<400> 6485

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gagggatcta gctaccctag tggttgctta tggcattagt atcaatcttg tcgaagtcac 180
atggaaatca aaactcaagg cacagttccc taatccaaat gaatactcat ctttcatggg 240
tgattttctca accgcaactg gaattgcaac ttccacgatg atgctgttag gacgtattat 300
actacggaaa tttggctggg g 321

<210> 6486
<211> 396
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-004-Q1-E1-C10
<400> 6486

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ctgctgcggc tcgatgcggt gcgaggcgcg cggaataacc ggaagagggt caccaagcgg 180
gtcctcgcgc tgcaggatgc tgttgacgcc ctcgaaccaa agccggcgcc ggattcggag 240
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gcgacggaaa tgccggtcgc cgctgagcac agcggccggg gttgggggtga atgcggcggc 360
tgaaacggtt gccgatatgg aggtggacgg gggcaa 396

<210> 6487
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C12

<400> 6487

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ggcggaggag gagccgagcc gagccgatgg ggcagcagtc gctgatctac gcgttcgtgg 180
cgcggggcac cgtggtgctg gccgagtaca ccgagttcac cggcaacttc accaccatcg 240
ccgcccagtg cctgcagaag ctccccgccg gcaacaacaa gttcacctac aactgcgacg 300
gccacacctt caactacctc gtcgaggacg gattcacgta ctgtgtagtt gctgttgaat 360
cagtcgggcyg acaaatcccc at 382
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<210> 6488
 <211> 294
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C3

<400> 6488

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ctattaggga attcttgaga gattagcact taaattcttt gaaacatccc ttttctcgat 180
gtacctccta tatatatcgt atgcttgatt catctacatg tttgtgttgc tttttgaagt 240
atctagacct gcagttatga ttcaggattt caaatagaag ctttttatcc atct 294
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<210> 6489
 <211> 421
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-C4

<400> 6489

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 tgttgcccaa gttgagttgc aaacaatgaa cgtgcagcag cccgctgatg ttgccggacc 180
 cagcgagggg gtggcgggcga tctccaaagg ggggaaggta nggccgaacc ggtgcagcgc 240
 ctgcaggaag agggttggac ttacgggatt caactgccgg tgtgggaact tgtactgcgc 300
 actccaccgc tactccgaca agcagcactg caagttcgac taacggactg ctgccaagga 360
 cgccattgcc aagggttaat ccggtggtga aggcagacaa gctcgacaag atctaagggg 420
 g 421

<210> 6490
 <211> 238
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C7

<400> 6490

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 atactctacg tttttcttaa ctcgttatcc ttctatattg tcacgactat tcaaactctg 180
 gactatcatt acataacctc cttactgcaa aaccgccttc ctcacactat tttatcgc 238

<210> 6491
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C8

<400> 6491

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 tctcgcttgg cggccgcgcg ccgccgcctc aggtcccg ggcctctcgc ccggtacact 180
 accggcgccg gacgacgacg acacacgcga ctgcaggcgc cgtttcgcca tcgaatctcc 240
 cttcttcgcc gctgccagag ggttttcagc agagactctt gctccaagaa accaggatgt 300

gggcttatct gagctcccag caactgtggc agctgtgaag aatccaagt gaaaaatcgt 360
gtatgatgag tataaccatg agcgctaccc ac 392

<210> 6492
<211> 333
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D1

<400> 6492

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agggtccgcg cagccgatag cctgcgcagc gccgtgccgt ccttcgccaa gatcgtcagg 180
ttcttgcccg cgcaggcgca gatcagccgc aggcggcgcg cggcggtgct gcccacgccg 240
aggggggcg tgctggggcac cgagaaggcg ccgtcgagca agcacgagcg cgtggtcagg 300
gtgcacagca cccaaggagt tgcagcagcg gct 333

<210> 6493
<211> 315
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B3

<400> 6493

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tgcacgcagc tagctaggag cagcagcagc ggcgggcgatg gcggcctcca tgatctcctc 120
gtcagctctg gcggtggcgc ctcagggcct gccgcccctc ggccgccgcg cctcctcctt 180
cgccgtcgtc tgctccaaga agaagatcaa gaccgacaag ccctacggga ttgggggtgg 240
cctgaccgtc gacgtcgacg ccaacgggag aaagggcaag ggcaagggct tgtaccattt 300
cgtcaacaat tacgg 315

<210> 6494
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H9

<400> 6494

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cctggacgag ctgggcgtgg cgtacgacga ggccgaggac tacgtggtca tcaagcacgc 180
cgcgctcttc acgtccacgg tcatgagcct gctcctggcg cgccccaacg tgaagctgtt 240
caacgccgtg gccgtggaag acctcatcgt caggggaggg cgcgtcggcg gcgtcgtcac 300
caactgggcg ctcggtgtcca tgaaccacga cagcagtc tgcattggacc ccaacgtcat 360
ggaggccaag gtcgtggtca gctcctg 387

<210> 6495

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-A1

<400> 6495

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tttgacgcca aattgaggag ggaaagcact gatgttgagg acttgtttct tgctcatatc 120
tccggaatgg acaccctggc cgtggcctc cgcaacgccg ccaagctgat cgaggatggt 180
tccttagatg ctctcgcccg caagcggtag cggagctttg atagttagat ggggtgccttg 240
atcgaggctg ggaaaggaga ctttgaggcg ctggagaaga aggtccttga gtggggtgag 300
cccactgttc cgtccggcaa gcatgaactg gcggagattc tgttcactc tgctctataa 360
atggcgccat gtccgtaccg gtagctcctg gaataagcaa gcactg 406

<210> 6496

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-A10

<400> 6496

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 ctgcatgtgt tgctaacgcg acaattttcc ctcaatgctc acaagctcct atagcttccc 180
 ttcttccccc ataccttcca tcaatgatag cttcagtatg tgaaaacca gctcttcaac 240
 cctataggct ccaacaagca atcgagcaa gcaacatacc tttatcacc ttgtttcaac 300
 aatcgccagc cctatctttg gtgcagtcac tggtaaaac catcagggca cagcagctgc 360
 agcaactcgt gctacctgtg a 381

<210> 6497
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-A3
 <400> 6497

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 tgtagacgcc caggtcaatt ttactcaagg aatccttgaa gggattgtat gagaggagct 180
 tggagtttta cctggaatgg attcgatctg tttagtctta gctcttcaga agctccttaa 240
 tttcttttca tctggaagga gtaattcaca ttcagaattt gatgtgatcg tgtatgattg 300
 caacaataca gaggaattc caccgctgat acgtgctgct gaccgggcaa gatcttactt 360
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 actga 425

<210> 6498
 <211> 441
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-A5
 <400> 6498

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 gcacaggcgc gagaagcgcc ggctgtcgaa ccgcgagtcg gcgcggcggt cccgggtccg 120
 gaagcagcag cacctggacg agctggtgca ggaggtggcg cgcctgcagg ccgacaacgc 180

gcgcgtggcg gcccgcgccg ccgacatcgc gtcccagtag acccgcgtag agcaggagaa 240
 caccgtgttc cggggcccgcg ccgcccagct cggcgaccgc ctccgctccg tcaacgaggt 300
 gctccgcctc gtcgaggagt tcagcggcgt cgccatggac atccaggagg agatgccggc 360
 ggacgacccg ctgctgcgtc cctggcagct gccctacccg gctgccgcca tgcccatcgg 420
 cgccccgcac atgtccact a 441

<210> 6499
 <211> 447
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-A6

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 gtctagcaag caccagcact acccgggcga gtatcctcaa gaggaggagg agcacaagga 120
 ggagttccgg cctccgtctc ctgccccgtc ctacacggag aaggacgtgc tctcgtcgat 180
 gctgagacgg ctccgtgagc tggagggcag ggtgcagggt ctcgagacga agccgtccga 240
 gatgccgttt gagaaggagg agctgtctaa cgcagccgtc cgccgcgtgg acgcgctgga 300
 agccgagctg atctccacga agaaggccct ttacgatgct ctgatgcgac aggatgagct 360
 gctcgcgtac attgacaggc aggagctgat caagttccgt aaaaagaagt tctgcttcta 420
 agatctgnac atggagcagc tggatcat 447

<210> 6500
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-A8

<400> 6500
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 aaccggtgtg cttcttggcc tgtggcaggt tgaatctggt actgatcctg cagaaatccg 180

ctcaagattg agagaagctc ttcctcgtgc acctcaaaag caactgtatg accctgttct 240
gcttcacacc tcgtttgcac gaattctgcg acatcccagg ctccctaaag agcaaagtgc 300
atcatcgttt gataatgtca agttcttcca tgagctagtt gctcaaatta atgagaagat 360
ctgtggcttt caggcgacga tatcagagct atgggtatgtc gaagagtacg atgttcttgc 420
attggcactg 430

<210> 6501
<211> 71
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B1

<400> 6501

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aggggctcca g 71

<210> 6502
<211> 461
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B2

<400> 6502

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gcctcttaga tgatcgtgaa ctcgatctag atctcaccac cgctctgtgaa cgaagctgaa 180
tctggaaccc tggagagtgg agagtgactg ggtgataacc gtgcagaaac ccccgacgag 240
tgaccacat cgccggcagg ctctcgcgcg cttgtgaact gaatcacggc acatgtaaaa 300
ctgaatctgg cagagcacac acgcgcctaa gcctattagc gtctatagac tttgcagggc 360
tatgtatagt agatatgtag attgagaccc tgctgaactt gtacgtgcag tatgttccta 420
gtcacttggt taacattact agtaatgcag taccctcgt g 461

<210> 6503
<211> 312
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H8

<400> 6503

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aggggcctgt caggcgctgc tgcgctcaca aggcggcccc ggggttcaa cgttcaaggc 180

aatcaacccc aaaaaggaac gttacaagtt gttcaaccca acaaccggga accctttcat 240

cggcagcctg aaaacgccgg tcaacttcaag cccgctcgtg gcttgggtacc tctccaacct 300

cccggcctac cg 312

<210> 6504

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G11

<400> 6504

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acgtaccatg gtacaatagc aattgggctc atcagggatga aggcgacagt atgatggctt 120

caatggagcc tttgctgtac actgctcatg tggatatggt aatagcaggt catgtccatg 180

cttatgaacg tgcggagcga gtctacaatt ccagacctga tccttgtggc gctgtccaca 240

taactatcgg cgacgggtggg aaccgtgaag gcttggcccc caggttacgt taaccgaagc 300

cagcgtggtc ggtcttcagg gaagcgagct ttgggcacgg cgagctaaag atcgtgaact 360

ccaaccatgc ccaactggacc tggcacagaa acgac 395

<210> 6505

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G12

<400> 6505

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ctgtcactgg agacattgta ttcgtcctcc agcagaagga tcactccaaa ttcaaaagaa 120
agggtgaaga tctcttctat gagcacacct tgtctctgac cgaagcacta tgtgggttcc 180
aatttgttct tacacatctg gacaacaggc agcttctcat caaatcagac cctgggtgaag 240
ttgttaaacc tgaccaattc aaggcgatta acgatgaggg gatgccaatt taccagaggc 300
ctttcatgaa ggggaagctg tacatccatt tcacgggtgga gttccccgac tcgctggcac 360
cagagc 366

<210> 6506
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G3

<400> 6506
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ggatatggtt ttctctgaga taacaccaga gcctgttgct gctgcatctc ttgggcaggt 180
ttaccaggct aggcctccgct ccagtgggaa gattgttgct gtcaaagtac aaagacctgg 240
agttcaagca gcaatttcat tagacatata tatcttgagg ttcctagcta atcttgcaag 300
gaaggctgcc aagttgaaca cagaccttcc agctgtgctt gacgaatggg catcaagcct 360
attccgggag atggattata ga 382

<210> 6507
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G4

<400> 6507
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cgtggccacc gtgctcaacg agaagggcct ccacttcgag atcgtccccg tcgacctcac 180
caccggcgcc cacaagcagc ccgacttctt caccctcaac cctttcggcc agatccccggc 240

tctcgtcgac ggagacgaag tctctttcga gtcccgcgcg atcaaccggt acatcgccag 300
caagtacgcg tcggatggca cggacctgct ccccgcga 338

<210> 6508
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H1

<400> 6508

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aggggcgcgc ggcaggccgt ctccggccgc ggatacaagg agtaccgcct cggggactac 180
tccaactggc tgcagaagcg cgtcgagaac accaggaact gggaccggat caggagctgc 240
ctccaggact ccaaggtctg caagagcctg caggacaaga acgagaccgt cgcccagttc 300
atgagttcca gcctctcccc catcgagtct ggctgctgca agccccccac cagctgcggc 360
tacacctacg tcggcggcac ggactggacc ccggtgacca acaac 405

<210> 6509
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H10

<400> 6509

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tggggatccg ttggagaaag gcaccttact gggaccactg cacactcctg cttcaaaaga 120
gaactttttg aaaggcattc agactatcaa atctcagga gggaaaatcc tttttggagg 180
atctgccatt gaatcagaaa gaaactttgt gcaccaacaa ttgtgggaat tacaccttct 240
gcaccagttg tgaaagaaga actcttttgt cctgtccttt atgctgtgaa atttcagacc 300
ttgaaggaag caattgaaat caataactct gttcctcaag gattgagcag ttctatattt 360
acaaagaggc caagatatat ttt 383

<210> 6510

<211> 83
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H11

 <400> 6510

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 aaaaaccaa aaacctgaca aaa 83

<210> 6511
 <211> 269
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H12

 <400> 6511

 cccactcgtc cgggtgaaaca tgagaatctt gtcaagttaa ttggagcttg caaagaacca 60
 ttgatggtga tcgttagtga gctactacca gggatgtcac tgaaaagtta cctgcatagc 120
 atacggccta gccaaactaga tacacacact gcaataagct atgcactgga catagctcat 180
 gcaatggact gtttacatgc caatggcata atacatagag acctgaaacc tgataattta 240
 ttgcttacag caaatcgcaa gaagctgaa 269

<210> 6512
 <211> 363
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H2

 <400> 6512

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 acgacaaaca tggggaagcc tgcgaagatc ggagagtggg gtggatacgc cggcgatcgt 120
 cgggatctga gggctactcc ggaccggctg atcgaggtga aggtcacggc ggacaacagc 180
 agctgcatcc gctccatctc cttcatctac atcggagccg atggcaaacc gtacgaggag 240
 gggccatggg gtttcggcca tgctggcacg gagtacaaga ttgatctgtg caggttcgac 300
 gagagcttga cggagatctc cgggaccacg ggcccagcct acaacattga caatctggtc 360

aag

363

<210> 6513
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H3

<400> 6513

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gacttaatgt actcgtttgt ggaatatatt tgttattggt gccttcgtca cttgctgttt 120
tgcttccgca ctggtaactt ggggggatct agggtttcag gaggagagtg gagatcatcc 180
cgatgatgat gcgaggtgga aggctcacgg gtttgacctc tcaggttctg aggtgcttca 240
gcacggagat atttgtcagc agattatcat tctatacgac agaggaagaa ttcaaagata 300
ttttttcacc atttggcacc gtagaggaag ctgcacttat gagagaccac caaactggaa 360
ggatgaaggg atttggtttt gtcaaataatt catcgcaag 399

<210> 6514
<211> 432
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-003-Q1-E1-H4

<400> 6514

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cctgctgata cctttcggga tggggcggcc caattgcccc ggggaaacgc tcgcgctgcg 120
gaccgtcggg ctggtgctcg caacgctgct caattgcttc gactgggaca cggttgatgg 180
agctcaggtt tgacatgaag ctanccggcg gctgaccatg ccccgggcgg tcccgttgga 240
ggccatgtgc angccgcgta cagctatgcg tgggtgttctt aagaggctct gaaaacctca 300
tggatcgaat tgctggcata gtctgaaggg tgtatgacgt agcttccgag ttccgagcat 360
atatattcac ttgccttgta acaatttaat ttctgccgat tgtatggaat ggattttctt 420
tttttttctt gg 432

<210> 6515
<211> 299
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H5

<400> 6515

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atattgagaa gctactctta ctcattccacc atgaataatc tttgctgcag tggagcttca 120
tgtcggcgaa caatgcaaac gttgtacttc tttcatgcga ttgagtagtt gatgttttac 180
ttctgttgcc accaacagtt gaacgctgta cttgcatatt gataagatct ccgtgcttcc 240
tttctagttt gcgttggttac tgatgaattt agcaaagctt ttattggtgg ttttatttg 299

<210> 6516
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H6

<400> 6516

cccacgcgtc cgccttactg agctttcatt caactggact ggcttcatca atgccatgat 60
atcaaacatc tcattcactt acaggagcat ttattccaag aaagctatga ctgacatgga 120
tagcaccaac gtgtatgctt acatctcaat aatcgctcta attgtttgca ttccacctgc 180
attgatcttt gaagggccca agctaatagca gcatggattt agtgatgcca ttgcaaaagt 240
aggtttgaca aagtttgta gtgacctatt cttggttga ctgttctacc atctgtataa 300
ccagattgct acaaacacct tggagcgagt ggctcctctg acacatgctg tcggcaatgt 360
gttgaaacgt gtttttgga accgtttccc caatcattgt ttttggaac aaaattagca 420
caciaactgg aat 433

<210> 6517
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H7

<400> 6517

gacttctcgc ttgcctgctc cagatctccc ttcgcagccg gccagggacc ccttcacagc 60
gcgggagatg gctgatcagg aggccccagt tgcagttgag gcaccaaccc cagttcttgg 120
agagccaatg gacttgatga ctgcgctgca gctgggtgatg aagaagtcaa gtgctcatga 180
tggactttgtg aagggtcttc gcgaggctgc caaggccatt gagaagcatg ctgctcagct 240
ttgcgttctt gctgaggact gtgaccagcc agattatgtc aagctgggtga aggcgctctg 300
tgctgaacac aatgttcacc ttgtcactgt tcctgctgct aagactcttg gcgagtgggc 360
tgggctttgc aagattgact 380

<210> 6518

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G10

<400> 6518

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ttgttcagcg atcactcgag cggtcgagcc ctgcgcccgc ggagagtgtc tccagtctca 120
agtacagcgg aggatggaga gcggtttgct tgacaccgcc gcggctgccg gtctctgccc 180
ggtggcgggc cggggccgcc gcgtccggag cacgggcacg gcgaggtgct tcctcagctg 240
ctctgcgct tccagagact gcagggtgaa ccgcgtccta ctcccaatct catcagcccc 300
gatgctgagc ggggggtgcg tccggcgccg gcaagaggct cttcaggagc gaccggcccg 360
agctgctggg cgtcgcca 378

<210> 6519

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-F1

<400> 6519

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accgtgaacg ccgcgccgct gcacgcgcac ttcgaggccg tcgccgccga cacggtcggc 120
gtgggcggcg tccgtggcgc catggagccc tgcattgggca gcgaggactt cgcgtccttc 180

tcggcgccg tccccgcctc gcatttctac ttcgtcggca tagggaacga ggcgatcggg 240
gccgtgcacg ccgcgcactc gccgcacttc ctcgtcgacg atggtgctg cccgtacggc 300
gccgcgatgc acgccaacct cgccatcgag tacttgcgga accacgcgat agccaatagg 360
tccgttggtc cccacgacga g 381

<210> 6520
<211> 402
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-F11
<400> 6520

accacgcgtc cgcccacgcg tccgcccacg cgtccggcaa tcgcgctgca ctcgcaggtc 60
atcacccagt tctgcaagac catcggcgcc gactccaagc agcggcaggg cctcatccgc 120
ctcgccaaga agaacggaga gaagctcgga ttccttgctt gagacgacca tgttctacgc 180
acatatataa gtatataatc tataagtact acatcatcaa gtagtggcgg acaatgataa 240
ttatattgat accttcttcc ttgctcccat cgagtcctct atcaagtggg agccagtaca 300
tgtcatgtga tgatgcttca attcagcttc cgatgctcgg ctgtccatca tcagctagct 360
gcatgctttt gttttgcttc attcctgcag agattactat tg 402

<210> 6521
<211> 431
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-F2
<400> 6521

accacgcgt cgcattgtac tgaatactct gaatacggca aggttcactg tggctgtgga 60
ttctttcatc aggactgggt atgtaccctc attgaaggat ggaaactcac aagagacaat 120
atttaatcca ccttggcgac attcgcccgt cgcaatagga tcaagatttg gggaggcggt 180
tcaagaacct gcttcgttta ttgctataaa acctttgttc gaggatgaga ggtatattgt 240
tacatataac ccgacaaagg acaaggctta tgctttgctc aaggaccaag caaagcctga 300
tgacattctc aaggccgctt ttcatgcaca tgtgctactg cattttatca atgctacaca 360

tgctaaccgg aatgcaccgg aaccccccaa cttcaatccg gtcacaccag tataaccac 420
tgaacatgga c 431

<210> 6522
<211> 345
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-F4

<400> 6522

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ttctttgatc aggaccgggt atgtaccctc attgatggat ggacactcac agtatacaat 120
atttaatcga ccttggcgac attcgcccgt cgcaatatga tcaagatttg aggacgcgtt 180
tcaagaacgt gcttcgttta ctgctataaa acctttgttc tcggatcaga ggtatattgt 240
tacatataac ccgacaaaacg acaacgtcta tgctttgctc acggaccact cagtgcctga 300
tgacattcgc aagtgtactt ttcatgcaca tgtgctactg cattt 345

<210> 6523
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-F6

<400> 6523

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gttcgtcggc cccacgttcg ccgcgctcac tggcctcgtc ttcaaagaag gtctctgcta 120
tgggaaactg gaagctggca tcttgacgtt tcttatccct gggcttcttc ttgggcattt 180
gtctggttta atggataaca gcacaaaggc aggtctttta ggactgtgga tgcttctttt 240
cacaatcttt gccgctagaa aattccagca gcccatcaag gatgacgtcg gagacaaatc 300
tgttttcatg ttcaacgctc tccctgaaga ggaaaagaag gcgtggatcc agaaactcga 360
gaggcaaaag gggcaagaat tgtttgagta tgaaaagatt accttgtctt ggtgcagcca 420
atagttcgtc cgtgaa 436

<210> 6524
 <211> 376
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-F7

 <400> 6524

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 aaaaaaaaaa agaaaaaaaaa aaaaaaagat aaaaaaaaaa aaaaaaaaag aaagaaaaaa 120
 aaaaaaaaca aaaaaaaaaa aaaaaaaaaa aaaggggggg ccccccaaag ggttcaagcc 180
 ttatttcccg ttgcaggcga ttttaaacc cttcaaaggt ttccccaat ttcatttcag 240
 gggccttctt tttaaaagtt cttaagggga aaacctggg ctttacccaa tttatcccct 300
 ttgcaacaaa tccccttttc ccagtgggc ttaatcctaa aaaggcccca acgttttgcc 360
 tttccaaaaa tttgcc 376

<210> 6525
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-D12

 <400> 6525

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 ctcccgagaa cagcagcccc cattggattt ggaagcttct ccatgggaca ccgagcctcg 120
 tagacgaagc agagggggacc agagaaaccg aggagcaaga agcagggagc catggcgcttc 180
 ctctaccca agctcacaac gccgtcctgc aagttgcccc cgagccccct cctcaagccc 240
 cagctcgtcc cgccggggcca cggcggcggc aagattcaag gtcctccgt ctccggctct 300
 ggcgcggcgc aggtcgcggg cccggggccac ctacgcctcc tgctcctgct cagcgcctcg 360
 cagcaggcgg ccggccccgc 380

<210> 6526
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-D2

<400> 6526

aaggctacgg tgggtggtggc ggcgggtacg gcggtggcaa ccgtggcggc ggctacggca 60

actccgacgg gaactggagg aactgagcgg tggggcccg cggccaagt tatcctgttc 120

gctaccgtgt tgtttaccct agtccagagt gtttatcttc gttcgtctcg tgtttggtgt 180

tgcccatctg tgtttttgat tgaaggtcgc tctgtgtcag ttgttagtgc tgtgttcac 240

ctcggctcca gcagacccat gcatcaacca gcatggactg cggatcgatg ggtgctgtta 300

ccccgctcag gctttattct aagttaaata ctaaggaaaa aaatggtgct tcttggtg 360

t 361

<210> 6527

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-D4

<400> 6527

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gcgagcgcgt gcgcgtcgac ggctctctcg tcagctcgcc ggcgccagc cccaacacgg 120

acggcgtcca cgtcgagaac accaagtcgg tccagatcct caactctagg atctacaacg 180

gcgacgactg cgtctccatc ggcgcgggat gctccgatgt ccacgtcgag aacataacat 240

gcggccacgg ccatggaatt aggtacctgt cagtctgtca ctactcact caccaacgtg 300

cttccatggc gcgcggtacc gtttgtagtg aacctgacgc ggcgagctgc tgctgtcacc 360

ctcgcagcat cggcagcctg ggtgtccaca acaccacgc ctgcgtgttc aaagtccacg 420

gtccggaacg tgcggatact cgactccgac 450

<210> 6528

<211> 297

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-D8

<400> 6528

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tacaccgcct taacgccgtc tatcgaatcc gtaccgctgg gaaggatcac tggggagcgg 120
agccaggctg cccgaccact gttttgtcga cccgatggca gcggaccagg gagactggcg 180
gcggttgagg cccggttttg ggatgtagaa gatctgcgat gtctgcgaga tcgtaccggc 240
ggttctcttc agtgcggtgg atcaggctgt gttttgccgg ctttgcgacc attaggt 297

<210> 6529

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E10

<400> 6529

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tgaaccagaa catgatgggg ggctacacct ctctgccgc cgtgaccacc gatctcatcc 120
agcagtacct ggacgagaac aagcagctga tcttgcccat cctcgacaac cagaacaatg 180
gcaaggcgga ggagtgcgaa cggcaccaag ctaagctcca gcacaacctc atgtacctgg 240
ccgccatcgc tgacagccag ccgccacaga ccgcgccact atcacagtac ccgtccaacc 300
tgatgatgca accggggccct cggtagatgc caccgcagtc cgggcagatg atgaaccgcg 360
agtcgctgat ggccgcgccg tcttccatga tgtacgcgca accgttcctg tcgccgc 417

<210> 6530

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E11

<400> 6530

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gtctacggat tttaattgaa ttgttctcta gtcgagtgtt cgactagcga acggaattcg 120
tctaaattca actaaatcaa acgtcgacta aaatatcgaa tccgatatcg tctagttaa 180
tccgtctaca tctcgctccc gtgacgatgc tgacatcgtc tccgggggga ttccgattgc 240
gatgccgcat ccggttagca cagtttaaaa ttacttatt tctaaaagtg tcgggcctag 300
tgccaattta aaaataaacg attaaggaca gactgaaatt gtcacctaaa tattttgctt 360

ggtttgagca ctctctataa attcggtaaa tacactactt ggggtaagct attagataaa 420
cg 422

<210> 6531
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E12

<400> 6531

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ggctggcggt catggcgggc ctcaaggggt acgagctcgt gtcaccatg ccgctctaca 120
ccagcctgga gaggaggggtg acgatgcggg cgttcggcgc caacctggtg ctgaccgacc 180
cggccaaagg gatggcgggg acggtgagga aggcgacgga gctgtacgag agacatccca 240
gcgcgcacat gctccagcag ttccagaacc ctgccaacgt caaggtgcac tacgacacga 300
ccggaacggg aaatctggaa ggacacgctt gggcaggtcg atatcttcgt catggggatc 360
ggg 363

<210> 6532
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E2

<400> 6532

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acgagaaggg caacgtcccc gcgtccgtga agatccagct gatacacaag ctggtcggcg 120
cgggcctgtc ggttgtcgag gccaccagct tcgtctcccc aaagtgggtg cgcagctag 180
ccgacgcaga ggaggtgctg aagggtataa agcaggagcc aagcgtgcgg taccgggtgc 240
taacacctaa cctcagaggg ttcgaggctg ccatcgcagc cggcgcgaag gaaatcgcgg 300
tcttcgcgtc cgcgtctgaa tccttctcca gttccaacat caactgcacc atcgaggaaa 360
gccttgctcg gtaccgcg 378

<210> 6533
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-E3

 <400> 6533

 aggccagtgc tgcagcaaaa aggtggaatg acttcgagta tgcgtttcgt gagatgttat 60
 tgaatgggta ccatttcgat gagcgaagac accttcggat ggtacttgac gcttttaggc 120
 atgggaagga acagctgttg gatgatctat ggactacct gtgccgtcac agccgtgtcc 180
 cgccctcccc tgtcataatg gaaagattct gcctaaaact gatgcagga gatacactgg 240
 cggcgatctc ctgcgtcagc agcttccatg agggcaagat atgcaacgtc tcttccatgt 300
 catgggtcaa tctgctgagc cgcaatgcag ataggctgaa ggaggagcat gttaccaagt 360
 tagctcatga actcaacagc ctca 384

<210> 6534
 <211> 131
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-E4

 <400> 6534

 cacgcgtcca gaaaaaaaaa aaaaaaaaaa agaaaaaaaa aaataaaaat aaaagtatca 60
 aaagaatata tataaatggg taaaatttac aatgagcgaa gaaaccttaa aaatggtaat 120
 tggagcgttt a 131

<210> 6535
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-E5

 <400> 6535

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 ccgccccacg ccatggacac cgtcggcctc gacttctctt ggctgcggca tccgtcctgc 120
 tccccgctcc atcccttgct cctctccata gacgccaga ccgatgccta gctctcccat 180

ggccgcccctg gatctccatg gtcgagtttt tcccctgcag gatccccccc aatggcgcct 240
 ggtctttttc ccttggttga aaacacctct gcacttaacc ccctctgttg atggtcgacg 300
 tctctccatc catggtacct aggtctccat cctcatgccc ctgcagcttg ttctcaagcc 360
 gccaaacctg gtgcgtcgtc cgctcgggtg aagacttgtc atttcctttg ccaa 414

<210> 6536
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-B5
 <400> 6536

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggaaaaa 60
 aaacaaaaag aataaaaact tacatacacc tacaagctaa aatccttcct cttccaaaat 120
 ggggcgcccg ctcaaattgg tgcaccctca ttacccttg ttctgaaggt gaaaccctt 180
 caagtttgcc acctaaatcc atttccaggg cactcccttt tacaccatct ggcctgggaa 240
 ccccttggtt ttcaccaatt taacccccct gcagtaaacc cccctttccc cagatgggga 300
 aacaccaaat aggcccgcac tattccccct tccaatcatt gtcacacca aaatggcaac 360
 tggaactccc cctgtactag cgcattaa 388

<210> 6537
 <211> 357
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-B6
 <400> 6537

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 caaggccacc gtggacggct tcagtgttac ggacttcac cggcgggtgcg acttcaaggg 120
 cccctgcgtc gtcgttggtt acaccgacgg tggcttccgt ttcggcgggt tcagcccgga 180
 ggggtaccga agcacggacg actactacga cacgctggac gcgttcctct tctactgggc 240
 ggaatctacg gaggtctcgg cgccgcccgt ggtgctgccc aaggtgggag ggagctgcgc 300
 ggcgctgttc gactactccc gcggcggggc acagttcggc gccgacagcc tgctcat 357

<210> 6538
 <211> 193
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-B7

 <400> 6538

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 aaaaaaaaaa aaaaaaaaaa aaaaaaata aaaagaaaaa agtgaaaaaa gacttccaac 120
 ggacgtgact acttcaaggg ccacagcgtc ttaagttggc tacgccggcg gtgccttccg 180
 tttcggctgg ttc 193

<210> 6539
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-003-Q1-E1-B8

 <400> 6539

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 aggtggcagt gaatactgtg attcaggatg agaaggaatt cttgaatcac attatcaaata 120
 caacaaacat gaagtgtctg acaccaccgt ctgcactaga cggagaatgt gggttccttg 180
 ctgctaattc ttatgcaaag agtgtgtttg gtgaggatgc tttggtgaac atcagcattg 240
 agaagcaaca tgatggcaag ctacgtgggtt acatccgaat aaggagcaag acccagggaa 300
 ttgcactcag cttaggtgac aagatttacc tcaagcagaa ggggtggcagt taactgtgac 360
 aagtgtgca gttgtancaa caattttccc c 391

<210> 6540
 <211> 427
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-C1

 <400> 6540

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 aggtaatggg attcttactg aagggtcaaac gagcaaagtt cgttttggat gaaacacgaa 120
 agtggatgtg gaaggccaga ggcaggacca cgcacaattt caaacaacac ctaatagtgg 180
 cacagaagct cctccatttt gtcgatgcat ttcacagta tgtcatggac cgagtttatc 240
 atagtgcagtg gactgagctt tgtgatggca tgacggctgc taccacactg gatgagggtca 300
 tggaagtcca cgaggcatat ctctcttcta ttcaacgaca atgctttgtg gcctctgata 360
 agctgtgggc cctcattggc agtcgagtta agactattct tggattggca ctggacttcc 420
 acaatgt 427

<210> 6541
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-C10
 <400> 6541

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 cgatgttgaa gtcgagactc aagatgaaga tgaggtatat tggctccaat caggacagat 180
 aaggcagcct gaagcacttg ggatatctgc agaactaaaa gataagggtc atgctttgtt 240
 gtgtgttggt tcccatctg gcatgttgga agtcgagact caagatgaag atgaggtata 300
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 agaacttgca atgggagacg aatgagctgt gcctaa 396

<210> 6542
 <211> 336
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-C11
 <400> 6542

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aaaaaaatt ataaaaattt tggattcaaa acagaacaaa aaaaagggcg ccactcataa 180
 atgggttttaa ctttatttaa ggtggcggcc cccttaaggg ttcacccctt atttccctt 240
 gatttccatc tccgggcccc tcttttggtt ccccccaact tgtgtatacg gggctttttt 300
 taaaattttc cccttgggaa aaccctctcc ttttcc 336

<210> 6543
 <211> 398
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-003-Q1-E1-C12

 <400> 6543

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 ttatcggcct catggcaagg tcaggaactg aagatgtggg aggctttaca gaagcacagc 180
 ttcaagagct tagggaaata aaaccaaaga aaagcagcac ccagcggaac gcgcttgctt 240
 ccgtgctgcg cctgcagagg aagatcatga gaacgatcaa ggagagcatg gacgagctca 300
 acagccagcg caaaagcatc tgggtggagcc ggtggatacc cagggaggag tangccggcc 360
 gcaggcgcac atgtacatcg tccacttctg tatgaaac 398

<210> 6544
 <211> 324
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-C2

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 tgtttaaatg caatgcactg caacttgctg gcagcaaaga gtatgtgctc ggtagcttc 180
 ttgctcatct gactgagggt actgctgatt ggaatggctt ttggatctat aactagagta 240
 tccaggtcat ttgtacttag gcaagtgtgt atactactct atgctggatt atcgaaatgg 300
 gggatggttt cttccctacg ttgt 324

<210> 6545
 <211> 365
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-C3

 <400> 6545

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gtgaggatca cttcaacagc tgttctgagc atgatgggct gttcagcact gaactgctgc  180
atagacggat ggagaaaaca gcagaaacgc tgggttttagc tggtatcaca atggatagtg  240
ctgagcttct gaatattgct ctggacaagt acatgaaaaa cctgattagg tcatctgttg  300
agttagtagg aggtagtgtt cagagggatg caaggaaagg gacaccaacc tacaagcagc  360
aagcc                                                                    365
  
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<210> 6546
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-C4

 <400> 6546

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tcttgcaggt tcctgggtgtt ccaatcatgt acatcacaag acataggtat tcgatagaac  180
ggctccctga ggccacaatt ggtggagcac caagaatctg atcggatgcag acatgagatg  240
ttctgggatg taatactatg gcggtacttg tccatctgac caagtcacta tttcatgttt  300
cagtccacga caaggactaa gataagaacg ctgctttcta ggttgagctt actgtaacta  360
ctaagaaatt tt                                                            372
  
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<210> 6547
 <211> 254
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-C5

<400> 6547

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gaatggctgg tgctgtctac atgacacctac ttactggatc ccggtattac gtttatatgc 180
cttgccttg tcctcctcag ctcgactctc ttgctttagc gccaggcctg gtaggcttag 240
ttgtacctgc ttca 254

<210> 6548

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-C6

<400> 6548

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aagagctcaa gatcctgcaa aaggttaacc acagcaacct ggtgaagctg gaggggttct 180
gcatcgactc ggcgacgggc gactgctacc tggtgtacga atacgtggag aacggatcgc 240
ttgacctgtg gctgctggac cgcgaccacg cgcggcgccct gaactggcgc gcgcgcctcc 300
acatcgcgct ggacctcgcc cacggcctgc agtacatcca cgagcaca 348

<210> 6549

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-C7

<400> 6549

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tgccgttttc tccaaagaaa ctggcagata catcgaggaa agcaaattga gaggttgtct 120
tgtagttca taccaatccc tcgaagagca acccactaat ggaattcatg aactgagcc 180
agctgttgaa gttcctttac tgaaagagat gccaaattta gggagcgaag taccagatgt 240

tgcaaaagaa attcctgccc ctctggtaca aggtccagca attgtgaccg gaataccttc 300
acctgtcaaa gaggttccag gcctgagaga aattcctgtg ccactgaacg aagcaccaac 360
tttattggca gaatttcctt cccctcaaaa 390

<210> 6550
<211> 136
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-C8
<400> 6550

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tgtatttgca tctatcagaa cttgtgtact tcgtatatta cgaacttgag aactgtatgg 120
atgtgtgcat tgtgcc 136

<210> 6551
<211> 408
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-C9
<400> 6551

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tcgccgagca ggcagagagg tacgaggaaa tggttgagtt catggagaag gtagcgaaaa 180
ctgttgactc ggaggagctc actgtggagg agcgcaacct cctgtctgtt gcatacaaga 240
acgtcattgg agcccgcctg gcctcatggc gcatcatctc ctccatcgag cagaaggagg 300
agggtcgagg caatgaggag cgtgtaacac tcatcaagga ctaccgtggc aagattgaaa 360
ctgagctcaa caagatctgt gatggcatcc tcaagcctct cgaatctc 408

<210> 6552
<211> 437
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-B4

<400> 6552

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gctgcgccgc ctcgccaagc cgcgcagctt cgtctacctc gtccacgtct tccccgtcgt 180

caccagcata cccaccccat gaatgatgcc taagagccaa gcaagcccgg agcagatcga 240

aacgtacctg aaccaagaga gatcgaagag gcgagacatg ctgcagaaaa tcttggacca 300

gtgccgcgag attcagggtta ccgttgacgt ctacctcatc gaaagtgatc agattgctaa 360

cgcgatcatc gagcttgttc ctgttctctc gcataagtca acgggtacta ggcgtctcaa 420

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<210> 6553

<211> 409

<212> DNA

<213> Zea mays

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<400> 6553

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ttatgaagca ggcgcgagcg ccctactcgg cctcctcgac ggcggcctcc acccggagca 120

gcacgaagcc gacggcgacg ccgacgagca cgaggccgct catggtggcg gcgacacctga 180

agatctcggc ggcggcggtt atctggggcg cgaacgcccc gccgcgccgc ttcttgcccg 240

cggggctgag cgacgccacg accttggcga aggagtagtc ggcggtcttg cgcaccccca 300

gcatggtcac cttgttgagc cccttgaggc cgctgtaggc gttcatgccc tccacgtacg 360

tgacgccggc ggcgggcctc ctcttggtg ccggggccgc taacgacgg 409

<210> 6554

<211> 365

<212> DNA

<213> Zea mays

<223> unsure at all n locations

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<400> 6554

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 catcaataat gtaataacat tctatccgaa ggctacattg gagcacatgg ctgcggttga 180
 gcttcgtgag tctgcatgca aaactgtgaa gcagagtga agcttggttct tgaaaagcca 240
 tggagagacc ggaacagctg gtgccctgt agtaaagaat actcgagtcc tgcagcctcg 300
 atgcnctggc cccggtgatg caaggccaag caaggttttc ttcaaggacg ctactgccaa 360
 ggaaa 365

<210> 6555
 <211> 340
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-H8
 <400> 6555

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 ttgttgtaaa gtaaagcgag gcaccagttt tgctgggtga ttttttttct ctctcacgtg 180
 aataaagctc aaaacagtaa acagagcagt gctttcatat cagcccatat tttttttcta 240
 atattgttga gtggtattga tggcaattgg gaattgtatg atttacttgc cttatgaata 300
 aagcttgaaa gaaacaaaat aaagattagt attttttttc 340

<210> 6556
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A1
 <400> 6556

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 tgccgctaca cgctcgaaaa gctccgcaag cgctatcgca ccgagggcgc ccgccccgtc 180
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gcgtcttccg cttacccggc cgcgactggt tcaccgcctg acgccgacgg cgaccaacaa 300
 ggataggagg aatactacga ggtggaggaa cacgaagcgg aataataaga catgcacgac 360
 gcaaacgagc aggatgaaaa actcccccaa cccaagaaca acacccggag catcaacg 418

<210> 6557
 <211> 357
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A10
 <400> 6557

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 tggggatctc gagcatgccg gagccgcggg acagcctgct ggggtacctg gtgtacaaca 180
 cggtgatctc gatcgcgggc ctggcggggc tgggtgcggg cggcgctggg gttcctggac 240
 ctgcatgccg cgctgccgcc cggggacgac ggcggggacc gactggcggc gtcggcgccc 300
 ggctggcggg agcggttcct cagggccttc cggccggcgc tgtacgacgt gctggcg 357

<210> 6558
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A12
 <400> 6558

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 actcgaggag cgtcggcagc gtcgccatgc tgctgctcgg ccgcgaggca gatcgcgacg 180
 acaagaggaa gctgacgctg gccaaagcca acctgaaagg gccaccacaa gaagcaggag 240
 gagctggtgc ctggcaggaa ggcgtttcgg accagggacg tagccccggc cgccgagcca 300
 ccgtcgccga ggggtgctgc catctgctgc gcgccctgct ccatcttccg ggatgccggc 360
 gccggtggct cgctgtctct ggcgcgggcg gccaaaga 397

<210> 6559

<211> 270
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-A2

 <400> 6559

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaacaaaa aaaaaaaaaa aaaggacgac aacaaaaagg agtataaaca 240
 aaaagaaccc tcgaaaaaag accagaaaga 270

<210> 6560
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-A3

 <400> 6560

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 cgtgctgggc cctcgaagac gagtggccct aaatagttgc agctgatctt cctaccgtcg 180
 ttttgctccc tcgggctccc tcacatttaa attgtaaaaa tggtaaaatt atatacaaac 240
 ggggttcgat tccaaccacg gttcttagct ttaaaccat cttcatacgt acctaaccac 300
 caaaaacaca catctatgtg ttttatattt tatattttgt atttaaacad aaatataaat 360
 ataaatcgta acaatatata tat 383

<210> 6561
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-003-Q1-E1-A4

 <400> 6561

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 tgcaattatc aatgatgtta ccttccaccc ctgcgtccga ttcaggcctt gggaatcaaa 180
 tcagatccta tcatttggtc ctcccgacgg gcagttcaag ctcatgagtt acagggttca 240
 gaaactgaag aagacaccga tctatgtgaa accacaatta acatcagatt ccgggaactg 300
 ccgtgttagc gtgatggtcg ggattcgaaa tgatcctgng aaacctattg attcgataac 360
 agtgcagttc cagttgcccc 380

<210> 6562
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A5
 <400> 6562

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 gatggcctcg tccaactccg ccgccccggc tcccgccgac gggggcgacg acctcgacca 180
 gtcctcgcac agcgcgctcg acgacttcac caacctcgat ctctctgcct ctgccgcccc 240
 caaaagctcc ggcgaggcat cggggtcagg atcgggaggc aaggggcccag tgaaggggct 300
 ggggctgggg cttccggacc ccaaggcgcc gaagcggcgc gcggggaagc agccgccgcc 360
 gaagggcg 368

<210> 6563
 <211> 360
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A6
 <400> 6563

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 ccatcggcgt gcccgagccc ctttcggtgt tcgtggacac gtacggcacc ggcgcgatcc 180
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tcatcaacct cgacctcaag aaaggcggca acgggcgcta cctcaagacg gcggcctacg 300
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<210> 6564
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-A7

<400> 6564

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cctacagcgg cctcaagggg ctcaacaagg tgaacatgct cggggtgcgc aagaccgccg 240
actactcctt cgccaagggtc gtggcgtcgc tcagccccgc ggggaggaag cggcgcgggc 300
gcgcgttcgg cgcccagatg aacgccgccg ccgagatcct caggatcgcc gccaccatga 360
acggcctcgt gctcgtcggc ctccccgttc ggttcctgct tgcctccggg tggaggccg 419

<210> 6565
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-A8

<400> 6565

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aacacggccc ccttcgcgca gcgggttcgca gagacgctgg actactacac ggccatcttc 180
gagtccatcg acctggcgct gccgagggac gacagggagc ggatcaacat cgagcagcac 240
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cacgaggtgt tcggcaagtg gaaggcgcggt ctgatgatgg ccggcttcag cccgtccccg 360
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caagctcgcc g 431

<210> 6566
 <211> 377
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-B10
 <400> 6566

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 tatcgtctgt ggcaaggag cttgcactaa ctggacttgg tccaacgttc aagtttctgg 180
 tggaaagaag tacgacagct gccagaaact ttcccagcgt tgcttcttgc taagggatat 240
 ccatttatta attttccaac tccacttggg ggatttaciaa cgtgtaatat ggaaagatag 300
 acttcattct tgtatataac ataaccattg gggccagctc gacaagttct tgctgtggtt 360
 cctaacaata taactct 377

<210> 6567
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-B11
 <400> 6567

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 ctctgcaaca agacagtttt accccttata aatctctcct ctggccaacg tcccagcaac 120
 gagtgagcat ccacccgact tagattagca gattcgtttc ctctgggttcc ttcattgaact 180
 catgctgaaa tggattgcta attaatgcta ttgtgggttg ttcattactg attgatgagt 240
 actatacatt acctgacatg ccgtcacgac acaaatttcc ttgctttact caattactca 300
 gtgtacaatt ggtgcatcaa aattcaaat ggacttgctg ctgtgattta ttcattgcttg 360
 gatcgattca ggtggcataa gtactaactt tt 392

<210> 6568
 <211> 237
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-B12

<400> 6568

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accacagtcg tttcgtccgg ttccttcagc agctcacgcc gaaatggttt gctcatgaat 180
gctattgtcg gttgtgcatt catgattgcc tattactata ccttgccttg gatgccg 237

<210> 6569

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H7

<400> 6569

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gcgagtgcga ggcttcacc accaccagta gcgagtgcga ggccgaccgt caccgcgagc 180
ggcgccgaac gcggcaatcc cccctcgatg acggtggctc caggccgggg cgtcaactcc 240
aacggcagcg gcgtgctccc aatcaggta gccgtcagaa aacgcgtgac cgccgctgtg 300
tcctggaatt tctcgctat ttcgtcctgt gttttttctt ccattttgtg tacacaattt 360
cctttttggt gataggtttg gtcatttact taggtaaagt 400

<210> 6570

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G2

<400> 6570

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agcgcacgac aacggtggaa atcatggacc catagaaatt ggttttttgt atagtagaga 120
tagagattag tcatcaccat gataaattcg accaaatttg aagatgattt ggtatttggc 180
aacaacaact ttactacta ttgagaaac cccaagtaaa attgaagcta aactacacta 240

<210> 6573
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G6

<400> 6573

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gcgccagcgc cgccagctgc cgcaccttac cctcccgctg gaccacttcg ccctgcgcgt 120
gccaccgcag cctcagccca ccgcgcgcgc gtccacctcc acgtccgacg cccgcctctc 180
cgactacgag aggtctctccg ttctcggcca cggcaacggc ggcaccgtgt acaaggcgcg 240
gcaccgccgg tccgcgcagc cggtcgcact caagctattc gcggacgggg acacctcggc 300
ggcgcgcgag gccgagatac tgatgctcgc cgcggacgcg cccacgctc tgcgcctaca 360
cgcggtgatt ccgtcggccg c 381

<210> 6574
<211> 323
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G7

<400> 6574

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tacctggtgg tggagcagga caagacgctg gccacctacg ggatcaacgc cgtgtgcacc 180
cacctcggct gcgtcgtgcc ttggaacggc gccgagaaca agttcatctg ccctgccat 240
ggatcccagt acaacaacca gggcaagggt gtccgcggac cggcgctctc gtcgctggcc 300
ctggttcacg ccgacgtcga cga 323

<210> 6575
<211> 387
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-G8

<400> 6575

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tccctcctta tgctccttgc tctttctgca tgtgttgcta acgcgacaat tttccctcaa 120
tgctcacaag ctctatagc ttcccttctt ccccatacc ttccatcaat gatagcttca 180
gtatgtgaaa acccagctct tcaaccctat aggctccaac aagcaatcgc agcaagcaac 240
atacctttat cacccttggt tcaacaatcg ccagccctat ctttggtgca gtcattggta 300
caaaccatca gggcacagca gctgcagcaa ctctgtctac ctgtgatcaa ccaagtagct 360
ctggcaaacc tttctncta ctctcag 387

<210> 6576

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G9

<400> 6576

aggttgggaa ctggaatgag cataactaatc tcaaagagca atccatcact ggtaacttca 60
tttgccttct tgctgtgtgg atatcttctc agttcatatc atgaggtgag atctgttgta 120
ctaaacaccc tgaatagggc aaggttcact gtggctgtgg attctttcat caggactggg 180
tatgtaccct cgctgaagga tggaaactca caagagacaa tatttaatcc accttggcga 240
catgagccag ttgcaatagg tttgcgctct tagtaatctt atatattcct gtatgctggt 300
gcaatgtaga acctctactc atcagttttg tt 332

<210> 6577

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H1

<400> 6577

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atgccaagg tttcagatgg acgcccttct tatcttgctg ttaatgctga tgagagtgag 120

cctggaactt gcaaatag agaaatcatg cgccatgacc cccacaagct tctggaagga 180
 tgccttattg ctggagttgg aatgagggca tcagctgctt acatctacat tagaggtgaa 240
 tacgtgaatg agcgtctcaa ccttgagaaa gctcggcagg aagcgtatgc agctggactt 300
 ctgggtaaga atgcttgtgg ctctgggtat gattttgatg tgcatattca ttttggtgct 360
 ggtgcgtaca tctgtggtga atagaccgcc ctac 394

<210> 6578

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H10

<400> 6578

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 ccgacaggat cgccggcgcg gcgatgatgg cgccggtggt gaactactgg tggccagcgt 120
 tcccacggcg atctggttgt gagacgtgta cgcaaccag gaggtgggag atcactgggc 180
 gctgcgcgtg tcgcaccacg cgccgggcat cctccactgg tggatggagc agagctggct 240
 gccacctcc acggtggtgg ccggcaccac gccgctgccc aacgagcgcg acgccgagat 300
 ccggagcaag atgaaggcgg acggcacgtt ccagcagaag cggg 344

<210> 6579

<211> 329

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-H11

<400> 6579

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 ggtggactac tgctcggagg aggtgaggtc ggtggccccg gccggcttcg gccgccacgg 120
 cggcggcgctc cagcagcacg tcgtcaagga gaagtctgag gaggtcgaca cggctctcacg 180
 cgccggcgcc aaccaccacc accaccatgg tcaccacggc ggccacggct tcgtggtgcg 240
 cgagaccagg gtcgaagagg acatcaacac ctgcaccggc gaggtccacg agcgcangga 300
 gagcttcctc gccagggcta actgagccg 329

<400> 6582
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gcctgcggtg gaacgtgcag gcggagctgg tgcactgccg gtgggcatg ctgggcgcgg 120
cgggcatctt catcccgag ttcctgacca agatcggcgt cctcaacacg cctcctggt 180
acaccgccg cgagcagcag tacttcaccg acaccaccac cctcttcac atcgagctca 240
tctcatcgg ctgggcccag ggccgccgct gggctgacat catcaagccc ggaagcgtca 300
acaccgatcc catcttcccc agcaacaagc tcaccggcac cgacgtcggg tatgtacatc 360
tctctctatc tctccttttg 380

<210> 6583
<211> 165
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-002-Q1-E1-H5

<400> 6583
agcccacgcy tccgcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa aaaaacaaaa 60
aaaaaaaaaa aataggtgga cgtacatgag gattcatact tctttgaggg tgcaaaactaa 120
ggttcaattt attcgagagt cgtattataa atgtaattaa tggga 165

<210> 6584
<211> 331
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-002-Q1-E1-G11

<400> 6584
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cgagagctac ggacgaatgt ggccacacat gcacacgagg atcatcgcg ctctgatggt 120
ttaccagacc accatgatcg gcttcatctc cctgaagaag ttcgcctacg cgtccgttct 180
cgtgccccctg cttccagcca gcataatctt cgcctacgtc tgccacatgc gcttctaccc 240
ggcgttcgcc aagactcccc tggaggtggt ggtgcggcac gacctgaagg agactccgaa 300
catggaggcc atctacaccg cgtacatacc g 331

<210> 6585
 <211> 375
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-H6

 <400> 6585

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 cgcgcgcgga gatgtcgtcg gactcgtcgt cgtgggcgcg cgccctggtg cagatctcgc 120
 cctacacctt ctccgcaatc ggtatcgccg tctccatcgg cgtctccgtc ctgggcgcg 180
 catggggtat cttcatcacg gggagcagcc tcatcggggc cgccatcaag gcgcccagga 240
 tcacttctaa gaacctcatc agtgtcatct tctgtgaggc tgtcgcaatt tatggcgtaa 300
 ttgtggcaat catcctccag acaaagcttg aaagtgtgcc aacatctcaa atgtatgac 360
 cgaggtctct tcgag 375

<210> 6586
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-E4

 <400> 6586

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 cggatacgtg tacaaggacc agatcaacac cttcctcacg cagttctcag ggttcattga 180
 cggctatggt ccagccggat atgctctgtt cgtacttgta tatgcaggat tggaggttct 240
 cgctattccc gcaatacctt taaccatgtc agctggtcta ttatttggtg gtgtgaccgg 300
 tacaattatt gtttcaatca gtggaacact agctgcagcg gtggccttcc ttatcgctag 360
 atacttcgcc agagatagaa ttcctaaa 388

<210> 6587
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E5

<400> 6587

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 ggtgtcgtct actcccttgg tgactggatt gcacagtgtc acgaaggcaa gccaatcttt 120
 gatttcgacc gtgctcggat gttccggtct ggtcttgttg ggttcacgct tcatgggtca 180
 ctttcacatt actactacca tatctgtgag gcactattcc cattcaagga ttggtgggtt 240
 gtccctgcaa aggttgcatt cgatcagacc gtttggctct caatctggaa cagtatctac 300
 ttcgtgggtct taagtttctt tcggttgga tccactacca ctatctacag tgaactcaag 360
 tctacattct ggcccatgct taccgctgga tg 392

<210> 6588

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E6

<400> 6588

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 cgtggatgaa cggctctggag atctgcgca tggaggcgga cacgggcagg gcgagcctga 120
 tcctgtcggc ggggggtgtc acgcggtacg tctactctgg gtaccagaaa accgccgcgt 180
 cgacgcagga ggcggaggcc tgggaggcgg cgaagaaggc ctgcggcggg ctccacttcc 240
 tggccatcca ggagaacctc aactccgacg gctgcgtcgg cttctggctc ctgctggacc 300
 tgcccccgcc gcctgtatga tggatggtct a 331

<210> 6589

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E7

<400> 6589

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 aggcgccaca catggcatcc cagctctccg ccgcccgtgcc ccggttccac ggccctccggg 120

gccggcgccct tgcactcgt acgtagtcct ccgatcgatc cgatcctcct tgagtagtat 360
 atacatacat gaacgcgant acgaataata tattaatcga acgaactg 408

<210> 6592
 <211> 332
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-F10
 <400> 6592

agccagcatg tgacagtggg cgtgggttggc ggatccgatc tggatgaagat taccgagcag 60
 ctcggcagta cagttattac tgattatgat tacgtcttct ccgaaaacgg cctgggttgca 120
 cacaaaaatg gccaaactaat tggaacccaa agtttgaaat catttatcgg agaagacaag 180
 ctgaaggaat ttattaactt cactcttcat tatattgctg acttggatat cccaattaaa 240
 aggggtacat tcatagagtt ccgaagtgga atgattaatg tatctcctat aggaagaaac 300
 tgtagccaag aagaacgtga tgaatttgag aa 332

<210> 6593
 <211> 323
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-F11
 <400> 6593

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 cctcttcccc tccacctcac tcctcccgtc tgacgcacat ggcctccatc gccgatctt 120
 ccgctctctc cttcgccatg cctgtcaagg caatcaactc aaattctcta gccttctccc 180
 cggtgaggaa gggtaacaca ttctccgcc tgcaaccagt gcctatgaga tctgtttcct 240
 gcgctgccaa gaaggatacg gtggacaagg tttgtgaaat tgtgaagaag cagcttgctc 300
 ttctgacca cactgaagtt tgt 323

<210> 6594
 <211> 351
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F12

<400> 6594

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ctctcttttc atctccattc taatggcggc ccaaccgctc cggcgaagct gctagtgtt 120
gtatctacta tcttcatcag gtacttcgcg atcctactga agtattcccc gccgccgctg 180
ccatggccac cctcaaccct ttcgaactcc tcggcgccga cgacaacgac gaccgctcgc 240
tggtgattgc ggcggcgggc gctgctgtc agaaagccga ggcgaagaag tccgccgtgg 300
cgctgtgtgg gaaggctgcc cagcctgcgg cgaccaccaa gtttccgaac a 351

<210> 6595

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F2

<400> 6595

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gctagctgag ctccgatact cgctagctag ctaggatacc gccataccac aagtcttctt 120
cacaagttaa ggagtgcag caacaagaga tctcgatggc ctctgccacc gtgctcaagt 180
cctccttccg tcccaagaag tccgaatggg gcgccaccag gcaggccgcc gcgcccaggc 240
cgcccaccgt ctccatggtc gtccgcgcct ccgcctacgc cgatgagctc gtgaagaccg 300
cgaaaacgat cgcgtcgccg ggcgggggca tcctgtcgat ggacgagtcg aacgcgacgt 360
gcgggaagcc gctggcgctc atcggg 386

<210> 6596

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F4

<400> 6596

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cgttctatct gccgccgcag cagcagccgc agccatggca ataccact caaccaccgc 120

agctaagccc gtgccagcag ttcggatcct gcggcgctcg cagcgctcggc agcccgttcc 180
 tgggccagtg cgtcgagttc ctgaggcacc agtgcagccc ggcgggcgacg ccctacggct 240
 cgccacagtg ccaggcgctg cagcagcagt gctgccacca gatcaggcag gtggagccgc 300
 tgcaccggta ccaggcgaca tacgggtgtgg tctgcagtc cttcctgcag cagcag 356

<210> 6597

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F6

<400> 6597

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 gcaacgcgtg ctgggaactt tactgcctcg agcacggcat ccagcctgat ggccaagtgc 120
 ctggagataa gaccgcggga catcacgatg atgccttcag caccttcttc agccagactg 180
 gtgctgggaa gcacgttccc cgtgcaatct tcgttgatct agaaccact gtgatcgatg 240
 aggtgcgcac tggcacgtac cgccagctct tccaccctga gcagctcatc agtggcaagg 300
 aggatgccgc taacaatttc gcccggtggcc actacac 337

<210> 6598

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F7

<400> 6598

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 cctcctcttc gtctctaat acccttcgct tccctctccg ccgccgcagc gccgcccgcc 180
 ccatcgccgt caccgccttc aagaagctct ccgaggcgtc ccccggtgcc atccctcagg 240
 agcccaccga gcccctctg gtcgacgagg acgctctgcc cccaaaggcc ggggtctacg 300
 gcgtctacga ccccgccggc gagctgcagt tcgtcgggat ttcgcgcaac gtcagggcc 360
 gcatcgaggg ccaccgccgg aaagtccccg ccaacctctg cgcct 405

<210> 6599
 <211> 362
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-F8

 <400> 6599

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 atcactgagt gaagaggagt ggaagaagcg cctgactgaa gagcagtatt atgttactcg 180
 gcagaagggc actgaaagag cattcactgg ggaatactgg aataactaaa cgccaggcat 240
 ttatcagtgt gtctgctgcg acaccctct gtttcagtca tcaaccaaatt ttgatagtgg 300
 tactgggtgg ccatacctatt ataaaccaat tggtgaaaat gtcaagagca agcttgatat 360
 gt 362

<210> 6600
 <211> 326
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-F9

 <400> 6600

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 aggcagacca ttgactactc tcttcaaggg tcaagttgct gaggagaagg gtggaatcaa 180
 gactgacgct tcctttgaaa caagcgttcc tggagtatat gccattggtg atgtggctac 240
 cttccctttg aagatgtaca atgagttgag gagagtggaa catgttgacc attctagaaa 300
 gtctgcagag caagctgtaa aggcga 326

<210> 6601
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-G1

<400> 6601

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cgcgattcga cacagcagtc accctatattt cggtgaaatg ctgagctgaa aggcgctcgtc 180

gatttcgtga tttcaagtcg gatttaattg acggtagctg aattaaccac gtgatgcgga 240

agacgagcca agtcgacccc aagcgcgggc tactccgcat ggtgatgctg atggacgaac 300

ctgcctgata atgtgctagg acaaggatga tcgtctaaca acactaacct agtgttaccc 360

aggcaagccc cgggtaagag tcac 384

<210> 6602

<211> 295

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G10

<400> 6602

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gatatgttgt actatacact ctgatcgggg catgggtcac tgtctccgta gattctttca 180

ttcagactgg gcacttcttc tccccgcatg atgttatctc cccatcattc ttctctacac 240

catcttcggg accagaacca gttgcacctc gtgtgcccac taactaatct tacac 295

<210> 6603

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E3

<400> 6603

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atttgagttc atcctagcga taccaataca cccatcccaa cactccaaac caaccaacac 120

ttcaaccaa ccaccacaac aatgccttca gtaaccagg cccgtctcat gtggcgtagc 180

gtcgcccgcg gcatggtaga gccccacccc ttcgctcgca atcccatcac catgaccct 240

cacgcctggc gcgccgccga cctctccaag aaagtcgtga agacaagcac tgtcttcttc 300
cccttctatg caggtatcct tggatggcca gtcgcagccg cctggtgggt caacggaaac 360
atgtgactct tccaaatgga agtgccaagg caggagaaga ggaagggacc g 411

<210> 6604

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C8

<400> 6604

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aaagcaaatg ataatgaggg atgggaattc atagatgcat tgcgcaaatg tcagttcctg 120
gaaaaactct tattatctta caatcagcta ggaggagcca taccaaattc agttgggaag 180
ttatccaaca acagccttca gtacctacga ttcggcagaa acaacttgtc gggagctggt 240
ccggagagca tggggaacct tattgcctta aatacgttag atctagaaca aaacaatttg 300
aacggtctga ttggatcatg gggtggaaag ttgaacaact tggtaagatt atctctttca 360
gacaataact tcagtgggcc cattccatag tccattagtt ggtaata 407

<210> 6605

<211> 271

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C9

<400> 6605

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catccgggtg ggactcagtc cctccttacc catcttagtc attcctttca tgctacctgc 120
atcaaccttc gtgagtttgt tgccatcgac atctagttca ttaaggcaag gaggaatacc 180
ttctcggatg gtacttatat ttgtgtcatc atcacggatc tactagacct tcttcattcc 240
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<210> 6606

<211> 402

<212> DNA

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 atttaaattc aagaccgatg aagaggaagt tattgccggt cttgatcgtg ctgtgttgaa 240
 catgaagaag ggcgaggttg ctcttgtcac aattcctcct gaatatgcat ttggttcaac 300
 tgagtcaaag caggatcttg ctgttggtcc acctaacagc acagtaatat atgaagttga 360
 gcttaattc 369

<210> 6609
 <211> 378
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-D3
 <400> 6609

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 tgtattggca agaattgtag accataagga agctatcata tctcatttaa gttgggctag 180
 cctcttccta ggattccata ccttgggcct ttatgttcat aacgacgtta tgcttgcttt 240
 tgggtactcca gaaaagcaaa tcttgattga acctatattt gcccaatgga tacaatctgc 300
 tcatggtaag acgacatatg ggttcgatat actcttatct tcaacgaatg gccccgcttt 360
 caatgcaggt cgaaacat 378

<210> 6610
 <211> 360
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-D4
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 tgccgacgtc gtccccgcgg aagtttctgg tttctgggtt ggatctctcg gagtcggagc 180
 gagcgaggat gggcggcggc aacggtgaaa ccaccagct gggggagcca ctgctggcga 240

agaaggcgaa ggcgtatcgc cctaggtgcc ccggctgccg ggtggaccgc ctcaacgcgg 300

agcgggaggg tgtcttcctt ctcaaggacc tcttctcat ctggctcgtc accatcacct 360

<210> 6611

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D5

<400> 6611

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ggtctaggag taagtgggtg tgcactggcc accgtgacct ctgagtactt gacagcaatc 180

atcctccttt ggaagttgaa tgatgaagta gatctattgt catggaatat aattgaggat 240

ggagtcatcc gctacctgaa atctgggtgt ctactaattg gcaggacaat tgcagtattc 300

ttgacactga cactagctac atccctggct gcaagggaag ggctgttcc aatggcgggc 360

tatgagatat gcttgcaagt gtggttaaca attcccctgc tcaa 404

<210> 6612

<211> 300

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D6

<400> 6612

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accggatccc ctttcccctg cgtgccggac tttcctccac tctccatcc atggctctct 180

gctgctttta ctccctcccc tgctcgcca tggtagtcgc gcccttgcca agctccctcc 240

gcgccgtggt gctccagctc ggctgcttc ccagctcgtc cggccgaagc gccctgctcg 300

<210> 6613

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D7

<400> 6613

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agagggacag gaagtggcag aaaaatgtat atggactcgg atcagcttcg ggacagaagg 180
aaaccttgtc caggagagaa aatccacggc cagatagagg gatgggtccac agtaacgaca 240
gcaaaacaat ttattacagg aagggtggga cggaagtcca taatgttgat gaccaccctt 300
tagaaaagca agaccaccag gatacatcaa gtgacggatc taaaagaga agccgaccag 360
tggacaacgc atctggtggc aacagaccat acttggatga gaacaaga 408

<210> 6614

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D9

<400> 6614

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agaggctgca ctgcaggtc aacagccagg ctaccccggt ggcccactgt tcaatccact 120
aggactcgca aaggatatag agaatgctca tgacgagaag ctcaaagaaa tcaagaacgg 180
gaggttggca atggttagcca tgcttggctt catggtgcaa gcatccgtaa ctcatgccgg 240
cccatcgac aatctcttga cacacctttc ggaccggtc aacaaaaata ttattcacac 300
attctcctct tctaagtac tcgtccaat gcccgatgc catggcgggc acaaa 355

<210> 6615

<211> 178

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E1

<400> 6615

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ctgcataata ttgtttgtaa cgtaaagtct gaaagaggag ataagatata taagatgg .178

<210> 6616

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E10

<400> 6616

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ggcaattcgc cgcagcctct caccctcgcg agtcccagacc tcccgcagcc gccgcacaga 120

tggcacccaa ggcggagaag aagccggcgg ccaagaagcc cgcggaggag gagcccgcga 180

cagagaaggt ggagaaggct ccggcgggga agaagcccaa ggccgagaag cgcctcccgg 240

cgggcaagtc caaggagggc ggcgagggca agaaggggaa aaagaaggcg aagaagtccg 300

tggagaccta caagatctac atcttcaagg tgctgaagca agtgcacccc 350

<210> 6617

<211> 346

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E11

<400> 6617

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ggagggggagg agggcggcag atggcgggct gccggggctt cttcgagtgc ctgctcaggc 120

tgctcaactt catcctcacc gtcgccggcc tcgccatggt cggctacggg atctacctgc 180

tcgtcgagtg gatgaagata tctgaggacg gcagcagcgg ggggttgacg gcggaggtgc 240

tggtctccgg ccggccggtg ttgggggctg tcgctctcgg tgacagcttc ctcgacatgc 300

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<210> 6618

<211> 318

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E12

6616-6617-6618

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ggcaccaact tcgagatcga ggcgagcccc gatgcgtcgg ttgctgacgt gaagaggatc 180
attgagacca ctcagggtca gactacctac cgggaggacc agcaaagtct tatataccaa 240
gggaaaattc tcaaggatga gaccactttg gaaagcaacg gagttgctga gaacagcttc 300
cttggtataa tgggtgtcc 318

<210> 6619
<211> 371
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-002-Q1-E1-E2

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cgcaagtccc ggcgcgtctt cctcatataa ctcggggagt cggcgacaga ggcgcccgtg 120
ctccccaccg atggtctccc cgacgatttc gactggaggg accacggcgc cgtcggcccc 180
gtcaagaacc aggggttcgtg cgggtcgtgc tggtcgttca gcgcgtcttg agcgtggag 240
ggtgcgcact acctcgcaac tggcaagctg gaggtgcttt cggagcagca gttcgtcgac 300
tgtgaccacg agtgtgattc atcggagcct gattcatgtg attcgggttg caatggtggg 360
ctaatgacga c 371

<210> 6620
<211> 405
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-002-Q1-E1-C7

<400> 6620
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cgccgacggc cgccggagta gagagatggc ggtggacgag gtgaactcgg tctacgtcgg 120
cggccttccc tacgaggcca acgaggagat gcttcgcgac gccttcgggt actacggcac 180

catcgtctcc gtcaaggtga ttaatgatca tgctgtcaaa ggcaagtgtt atggttttgt 240
tactttcact caccacagag ctgctgagca agcaattgcg ggcatggacg gcaagaaatt 300
aggcaaccgt attgttcgag taaatgaagt gcgtacaaga ggcccccgcg attttggccg 360
agatggtttc agacgagatc caagaaggta tggtagagat ccata 405

<210> 6621
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B1

<400> 6621

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ctggatctct accccttact ctgacgacgc cattttctga tttccttcgt tacttcaccc 180
tcctctctct ctctctctct ctctctctct ctctctctcc agtcagcaag cagttcttgt 240
ttgtcatgct tttgtaagt tagttatata atttgtgaca ctctgcttta aaggagttgc 300
ttgctttggg ggagcgaatt ggtaccgtaa acacaggtct ttcagacgac gcgttatccg 360
cgtgcctgaa c 371

<210> 6622
<211> 330
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B10

<400> 6622

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agtggtatta cattcaatgt tgcacccaat atgaaggcgc ttgaaattgc tgagaaagcc 120
agggatgctc tcctaagtgg aaagtttgac caggtagctg tcaacctgcc aaatggtgac 180
atggttggtc aactggtga tattgaggcc accgtagttg cttgcaaggc agctgatgaa 240
gctgttaaga ttattttgga tgctgtcgag caagttggtg gtatttacct tgttaccgcc 300
gatcatggca atgctgagga tatggtgaaa 330

<210> 6623
 <211> 319
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-B11
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 tctaatacaga aaccctgct ctctcttcgc gttgagggtc cagtttcctt gtcctcgact 120
 ccttccatgt ctcccaagga caagctcaag ctcaaacggt tggccccagg ccaagtggag 180
 ctctcctcac aggcgggggc aatccctgct atcacgaag acgaggatga accacataac 240
 cctggattgt ggctctttt gtctctgaat ggttcagatg gcagcctgca tgggtttgag 300
 gagctattgg cctcagtac 319

<210> 6624
 <211> 357
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-B12
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 atcgccatcg tggagcagtc ggtgtcgccg ggccggggcg cgtggctggg cgggcagctg 180
 ttctcgccca tgggtggtgcg caagccggcg cacctgttcc tggacgagct gggcgtggcg 240
 tacgacgagg ccgaggacta cgtggtcac aagcacgccg cgctcttcac gtccacggtc 300
 atgagcctgc tcttggcgcg ccccaacgtc aagctgttca acgccgtggg cgtggag 357

<210> 6625
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-B2
 <400> 6625

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 cctttgaagg agctgcaaaa attgatgaga atccagtcac tgcgttgta tgcactgtat 180
 aaccatggcg ccaccaggtt atctgtaatt ccaattcatg catcgcgatc tcaggctcta 240
 aggtatttgt ctatttgcct gggcatagag ttgccagatg ctgtgggtcat tgttgggtgaa 300
 actgggtgatt ctgattacga agaactgttt ggaggtcttc acaagacagt catccttaag 360
 ggtggattca acactcctgc caataggatt catacggg 398

<210> 6626
 <211> 386
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-B3
 <400> 6626

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 tgctcgcaag ctctatagc ttcccttctt ccccggtacc tctcaccagc ggtgtcttcg 180
 gtatgtgaaa acccaattct tcaaccctac aggatccaac aggcaatcgc agctggcatc 240
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 gtgcatttat tggcacaana catcagggca caacaactac aacaacttgt gctagcaaac 360
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<210> 6627
 <211> 406
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-B4
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 gccgccagcc gctctccgc atcacgccgc tctactacat ggcgtccctt ccggcgacgg 180

aggagagatc cggaatcacc tggactaagc agttgaacgc gccgctggaa gaggtcgacc 240
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 tcccgtcgga gaatttcacg tccgtgtcag tgatgcaggc agtgggttcc gtcacgacca 360
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<210> 6628

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B6

<400> 6628

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 aacgacacgc cgctgtacca cgacaagctc gttagatttt acatgaggat gggtttcaaa 180
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 ggtaggggta ctagaatgga tgctgatatt gaagagcttc ttattaagtg gggaaacaga 300
 ttcagactac aagactaaaa ggtggatggc aatactgata tgttttgcg agacatgcag 360
 tttttgcagc atgccgcata caaatcttgc ttggatgcaa t 401

<210> 6629

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B9

<400> 6629

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 accctgacct ggaggagacg agcaccgccg cgcaggccac cgtcgtcctc ggcgtggccc 180
 cggagaagaa ggccgcgccc gagttcgtcg aggccgcggc ggagtccggc gaggccgccc 240
 acggctgcag ctgcgggtggc aactgcaagt gcgaccctg caactgctga tcacatcgat 300
 cgacgaccat ggatatgatt attatctatc tagcttcttg tgggtggtga acaattatta 360

gccaaagggccc acctggctgc catacatagg tattgtgtgg tgtgtgta

408

<210> 6630

<211> 344

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-C10

<400> 6630

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ccggccgctg ggccgcgccc cgcgcctctc cgctccgcgc gctcccggcc cgctcgctca 180

ccgtcgcttg cagcagcgcc gggcgggcag ccgaggcttc ggacgcccga gcgccagtgg 240

agaagttccg gctcgacaat ttggggcccc agaaggggtc ccgcccggcg cccaagcgta 300

agggacgcgg tattgctgca nggccaggcg cgagctgcgg gttc 344

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<211> 326

<212> DNA

<213> Zea mays

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<400> 6631

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agactcggcg agttcctgag gagggcggtg atgatgacga cgaagacgca gaggacatgg 180

ctgcggaaga cgaggtgatg gatgaagttc tgggcatcaa cgatgggatc aacgaggacc 240

catccaagcc gtccgaagaa gctactactg aaggtggtga gcctgcaccc gaggaagcac 300

aataggattc tttgttcaca caagct 326

<210> 6632

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C2

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caaggcgaac ccggagtacc aggtgtaccc catcttcaag tatttcgaga actggtgcc 180
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caatgactgg aaggccaagc tctggtcacg gttcttctgc ctctcgggtg atatgaccat 300
gtacctgaat gactgccaac gcaactgcatt ctatgaggga attggtctgg acaccataga 360
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<210> 6633

<211> 406

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-C3

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gccgccctca tccgagaccc agcttcctta caagagtcag ttacaaattt atgctcagaa 240
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atttaagtca gaagtaacca tagatgggtc aacatttgag agcccagagt actgtcacac 360
aatgaaggaa gctganacag ttgctgcaaa agttgctctg atgtcc 406

<210> 6634

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C4

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 aggtagtcca tggtatcttg aggtccatt ttgtttgaat tgctgactgt caggtgtttt 240
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<210> 6635
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-C5
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 gcaccctcca cctggtgctg cgcctcaggg gaggaatgca gatcttcgtg aagacattga 240
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 agatccagga caaggagggg atccccccgg accagcagcg gctgatcttc gccggcaagc 360
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<210> 6636
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-C6
 <400> 6636

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 gtgactccat ggacgcgggc cagcaggatg cgtgggactg ggactgggag gtcctgctgc 300

cataccacag gagctcctcc tccgtgcgcc accacggcag caagaataac cttgacgatt 360
aagaagaaac agacgagcac gaactgctgc ctccgccca 398

<210> 6637
<211> 312
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A9

<400> 6637

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atgggcgaca tcaccagcac ggccggagttc aggttcggct ctggtttcaa catgtctagc 180
accgccgccg ctgattaccc aggcgcggcg cagaagaacg acggggccaa ttggttctac 240
tgaagaataa aacttgtagg gtcctctggt ataagcttcg gattcctcca tggctctccc 300
aagttgtcaa gt 312

<210> 6638
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H12

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tccgccgagc agcggccgca ggtccttcca cgggaccagg ccggtggcgg caagggacta 300
ctacgatgtg ctggcgctca gcaagagcgc cagccaggcg gagataaaaa aggcctatta 360
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<210> 6639
<211> 422

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-H4
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 tccccgccgc cgcgaggacc accgcccga ccctacgctc cgtcgtcccc tcccagggga 120
 tgcgctgctc gatgcgcaag aaggggttgc acccgagat ctacgaggac gcgaaggtgt 180
 actgcaacgg cgagctggtg ctggtgacgg ggggcaccaa gccggagtac acggtggacg 240
 tgtggtccgg aaaccacccc tactatgtcg gcgacacctc ggcgctcgtg gtcattggaca 300
 gccagatcga gaagtccgc aagaagtggg gccacatcaa ggagtactgg cccgaggacc 360
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<210> 6640
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-H5
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 cttctgcggc gccgccaact ccctctccca gctctacgcg caggccatgg cccagcagaa 180
 gctcaacttc catgccggcg agcgccacgc cttagaaaag ctctaccagt ggatcttgag 240
 gaagcacgat gaagaggcta ggctcactgt ggctgaaata atgtctcata tccagcatga 300
 gatagactat gtaggtactg atgcacatgt ctccccaaga gtacctcagc atcctcagat 360
 tgcaaatacca ttcgccaatt cagttgtccc acctggaact ggtttgta 408

<210> 6641
 <211> 354
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-H6

<400> 6641

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acaagcttgc ataagtacca gtgatgactg cgctcgtcaa ggttgctgat ctagccgtga 120
tgatcaccgg cgccgccgtc accgtgatct ccgtggggat aatcgggtctc gccaggaggt 180
ccatctgctg aatgaagatg gccgtcgcaa cggcgttggg gggcacgatc cgcaagcaca 240
gcgtagacgt tgtggtggac aactacggca acacgagcgt ctagtcttgac ctcgacgaga 300
tcggaacgac catcggatag tgggagctct agagctcgga cgtccacacg ttct 354

<210> 6642

<211> 340

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H7

<400> 6642

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gatttcctcc catctacgac tacgatttga ttcctcctgg gagtcttgat cgatcgacac 120
ttgttctggt ctgtacagcg agtaacaacc gctgctgcta gctacattct ttactgtact 180
gtacttgtgt gatgacatca tatcttcgcg tcgcgtgtac tgaagaacta cacattgcac 240
taaggttgct ttcgtacgtg tacgtgctca tctttcttcc ttggaaatca ctcggatgtg 300
ccgccctttg caaaatgaag cgatcccttg tttttcttct 340

<210> 6643

<211> 412

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-H8

<400> 6643

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tggagtggag caacggcacc gccttcctgt tcgactccgc gtcctgccgc acattccagt 120
tcgccgtggg cctcctgccg cccgactgga aggcccgcg cgccgcttac ctgnggcgcg 180

t

421

<210> 6646
 <211> 346
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-A12

 <400> 6646

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 ggcggtgccag gtggtgctca tgggcttcgt cgagggtac cgcgtcggcg gcggcccgct 120
 cggggaaggg ctcgacaagg tgtaccccg cggcgccttc gaccgctgg gcctcgccga 180
 cgacccggac accgcccgcg agtcaaggt gaaggagctc aagaacggcc gccttgccat 240
 gttctccatg ttcggcttct tcgtgcaggc catcgtcacc ggcaagggcc ccatcgagaa 300
 cctcttcgac cagtcgccc accccgtccc aacaacgcct gggcat 346

<210> 6647
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-A2

 <400> 6647

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 tccccacctc gtcttcgttc tgctcctacc aattccagtc ccagccatcc gcccgcccaa 120
 ctatggcggc aacggctctg ctactcccca gcctcgcggt gtcacggac acgccgcgcc 180
 gcgcccacag gttgctgcag ccgcagctcc agctccagcg cggctccctt gtctctcggt 240
 ccctccggcc tccgcggcgt cggcggtctg cggctcggc cgtgcaagag acgaacgacg 300
 gggaggccaa gacggccgac gagataaccg agaagtacgg gctcgagttc ggcctctgga 360
 aagtgttcag etc 373

<210> 6648
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A3

<400> 6648

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tgaattctgg tacaatacat cataccatac ttccctggat tgttctccat tcaaggcctt 120
gtacggctat gatccaccat ttgctgctgc ccctattatt ccatctgata ctgatcattc 180
agtggcccag gtgttggtcg agcgtgctca ctttactgag atgttgaaag accagttggc 240
tgttgctcag aacaggatga aactcaaagc ggatcgcttg cggctctgagc ggcagttcca 300
gggtgggggat ttgggtttgc tcaagttgca accatatgct cagcattcgg tgggtgaaccg 360
accctgtccc aagctcgcgt tcacaatttt tggggccata caaagtgctg 410

<210> 6649

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A8

<400> 6649

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ttgaagccag agaattttct cttcacaaca agagatgaaa gcgctcctat gaagttgatt 120
gactttggtc tgtcagattt tattagacca gatgaaaggc tcaatgatat tgttggaagt 180
gcttattatg ttgctccaga ggttctacac agatcataca gtatggaagc agacatttgg 240
agtataggtg ttataacata cattctgctc tgtggcagtc ggccattctg ggcaaggaca 300
gaatctggga tcttccggtc cgtattgagg gctgatccca attttgacga ttcaccatgg 360
ccttcagtat 370

<210> 6650

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H1

<400> 6650

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 tcggagtcgg agcgagcgag gatgggcggc ggcaacggtg aaaccaccca gctgggggag 240
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 cgctcaacg cggagcggga gggggctctc cctctcaagg acctcttctt catctggctc 360
 gtcaccatca cctgcacctt gccgatccag tctctgttcc ccttcttgta 410

<210> 6651
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-F5

<400> 6651

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 gctcctctgt tcggcaggac tccttcaagc agaaggggag gagcagcatg gcggggcgct 120
 acgacggcaa ccccttcgag gaggaggacg tgaacccttt ctcggaacaa gcgcgcggca 180
 aggctggcgg gcagtccaac ttcggcggtg gtgcgtttta catgcctaac accagaaaca 240
 tgcctcctgc atccaattcg cgcccttcgc cgcttctctc tgaaccagca gacttcagtg 300
 ctacagtgga catacccctg gactcgtcaa aggacctgaa gagaagggag aaggagctgc 360
 aagcaaggga agcggaattg aacaagaggg agaaggaact aaaa 404

<210> 6652
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G1

<400> 6652

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 atccaggacc cccaggaagc agcaacaag cttctcgaag aagcttcccg aaggggaagc 180
 tccgataaca tcacagttat catcgtccgc ttcataagac gaactaccgg tgagaaatca 240

ggcgacgaca aagagaccac caacgaccaa cactcctagc tgtctcgtgt agggatccat 300
 cgtgctgtgt gttcttctgg ctgttgtagc tgatgctcag agtagacgct ggctgctgct 360
 ccgcaaggaa actgactccc ccgaccgccg ttcattgctc tgcttggtg gctc 414

<210> 6653
 <211> 171
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-G10
 <400> 6653

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 ataaaaagac atacacgtaa aagcaaatat actggaacat cgtcaacgtg cattaaagtt 120
 aaagtcaacg gacgttcgtt ttacaacgtt tttcaatggc aataccctgg c 171

<210> 6654
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-G11
 <400> 6654

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 tgcgttgag gttattgagc catcaaaact gtttgagcag ctacttggcg tcattctttc 180
 tgtatgcttt gtggcagctg aatcagtttt agcagcagat agcaatctgt caaaattatt 240
 ctacgattgc aaggactaca taattggcgt ttaccacaat gacatgtcaa aagatgagct 300
 agatgagatg tacaaggtgt acgagacgat ggaagccata gtaaccacc ctgaagaagc 360
 tctccagatc atggagcaac ctgatgagaa gtctgttgac aataaaaacc gc 412

<210> 6655
 <211> 405
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-G12

<400> 6655

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cgtcttttga gaccactggt gaagttgaag aaggaatgga gattgaccgc ggttatatatt 120

ccccacaatt tgtgacaaac cttgagaaat caattgtgga gtttgagaat tgtaaggttc 180

ttattactga tcagaagatc acaagcataa aggaaatcct tccgattttg gagaagacca 240

cacagctgag agccccctctg ttcattattg ctgaggacat tactggtgaa gctttggcaa 300

ctcttggtgt taacaagctt cgaggaattc tcaatgttgc agcgattaag gctccaagtt 360

ttggtgagcg gcggaaggct gtacttcagg acattgccat cgtca 405

<210> 6656

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G2

<400> 6656

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tcttcagcct taagggcaag gtcgtcatcg tcaccggtgc ctccggcccc accggtattg 180

gcacagaggc tgcccagagga tgcgctgagt acggtgccga cctcgccatc acctacaact 240

ctcgcgccga ggggtgccgag aagaacgcaa aggagatgag cgagaagtac ggcgtcaagg 300

tcaaggccta caagtgccag gtcaacgagt acgctcagtg cgagaagctc gtcaaggacg 360

tcatcaaagg actttcggaa aggtccatgt cttcatcgcc aacgccgga agactgccga 420

c 421

<210> 6657

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G3

<400> 6657

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cgacgacgga gacgatggag atgggcgctg tcgtcgacgg cgtcagtagc aacgtatcag 120
gcggtcgcg cggtctggtg gtgacggagc tgagccacat caaggagctg gtgaggcagc 180
tgaggtgca cctcgggcgc tccccggacc tgtgcaagca cctggcctcg cagatcttct 240
ccctcaccga gcgctccatc ggctcatca actcctctc cagcggcctc gacggcgccc 300
gccgaagcg ctccgcgggc gacgcgggcc tcgcctcgcc gctctcggcc acgcccacca 360
gcggcgtcac cgacgggccc ttcaagaaca ccaagaagag gaaagcga 408

<210> 6658

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G4

<400> 6658

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ggggagtctc cgagaccgtc gtggctggcg gagcccatgg tgaaggcggc gttcgagaag 180
ttcggcgcca ggatgaagga gatcgagggg ttcacgacg agtgcaacaa caacctggac 240
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ccgggagtca ccgggagggg catccccaac agcatctcca tctgatccat cctcagcatg 360
cattagtcca attaattaaa tcgggggttg t 391

<210> 6659

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G5

<400> 6659

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tccggggaga agacgccgtg ggtgccggac ccggtcaccg gctactaccg cccggcgggt 120
ggcgccaagg aggtggacgc ggcggagctt cgcgccaggc tgctcaccaa gaggatcgcc 180
aactaaatca atctagcagc agagcagtg ggctgagatt atttagcgcc agttgatctc 240

ttgggcctag agcatgacgg tgctgtaact tttgagggcat aatatatata gatagataga 300
 tggaagagc tcgaacgtat ctccgtttct agaaagaatg gcgcaattct tgctttgctt 360
 tttaacgagt caatttgtct tgactttacc atattgtata cgaaaatgta cta 413

<210> 6660
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-G6
 <400> 6660

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 cgttatcgaa gacctgcaat attttgggag atggaccttt gcctttgcct ttgcttagag 180
 gattgggtatt tggtagcaga gattttctct atccaagtga gttgtgagca gcgagcattt 240
 agtcaaactg tacaaaagtt ttccgggata ccctttttgt aataaaagaa actgatgtat 300
 tccgcagtag ctgtagcgct ggatataatg ttcctttgta tggtatatat gacagaatca 360
 tagggaaata acagatgtaa agttaatcca aaaaacaaag aaagaaagtg gg 412

<210> 6661
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-G7
 <400> 6661

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 cgtacaaggt ggccgagcgc gccgcccgg cggcacccc ggtgacgggtg accgtggagc 120
 cgtcgacgct gagcttcagc agggccggcg agaagcagag ctacacgggtg agcttcacgg 180
 cgggcgggat gccgtcgggc accaacgggt tcgggcggct cgtctgggtcc agcgaccacc 240
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 agcaatagcg agataaaatc ccgattgggg gacggcaatg gcgagcgcgc gccattctcg 360
 aatgcgagag agatggcgga tatcgtcgag gatgtgctgt tgtatttgtt gc 412

<210> 6662
 <211> 344
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-G9

 <400> 6662

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 agtcaccact atgatctttc gtctgttggg tgtgacaacg atctcctaac ccatctatat 180
 ctgagactac tcagagcact atatattctc acatttgaga atgccgatca atatctgaga 240
 cagtacacac attcatgtat acatgtgtca tatccacatt agaaatatat attatgtttc 300
 cattagtcac ctgagagagt cttgcccagg agcttgttca gatg 344

<210> 6663
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-F4

 <400> 6663

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 caaaacctta accaaaagtc aattaaagaa aattgcaaaa ctgaaaaggt aatgtgcaaa 180
 aaagggagtg aaccccgga ttgaggttga tgggtgtgtt ggtccgaaaa atgcctacaa 240
 ggttattgaa gctggcgcaa atgccattgt cgcaagttct gcagtttttg gggctccaga 300
 ctacgctgaa gctatcaaag gaataaagac cagccaaaga cctctagctg tagccgcata 360
 aagagctgga cgtgtaataca tttac 385

<210> 6664
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-E1

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 tgtagaaaat ttcaccactt atacatg 387

<210> 6667
 <211> 413
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-E2

<400> 6667

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 caaggacggc gtctacatcc ccgacgtcga caagctcgag cggctcaagc tggccgagat 180
 caagcacgcc cgcacgcga tgcttgccat gctcgcttc tacttcgagg ccgggcaggg 240
 caagacgccg ctgggcgcgc tcggcctatg atttgcacgc tgccggcgaa cgagtcagtt 300
 ctcgattgcg tgggggtgggt gagctcctag ggacgtacgg ctgcagcgga tcagacgcct 360
 tgcttcgcag attggaggcg anagaagagc gtagcagcaa tctactgtct gtg 413

<210> 6668
 <211> 413
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-E3

<400> 6668

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 tgggtggccaa aggaacagat atgttgatc ctacaacttc ggtcacagga acgcactcca 180
 ctactgtcgc tgctagtgc acaaacgcca gcttaccaag tgctcttcc cagataacat 240
 caatgtaacc caggcttgag aagtagagca tcatcatcgc ggacagcagg aaaccagaaa 300
 tgaacatcga gatgctcccg gccagctct tcttccgatt gaatggcagc ttcgctgagc 360
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<210> 6669
 <211> 349
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-E4
 <400> 6669

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 ttgtttttga catgccaatt gctgagttct gacttggcaa gggtgagcat aagtctttct 120
 tcatttgga gttatcacag agccagtttg gcagtgtgt agttttgggt ttacctactc 180
 tttgtagaag aaaagtgaag agtggatatt atggaacaaa atatatacct acggcagcac 240
 gcagcatgat gaaacatatt taaaaaattt ggggtgctcta ccacatgcc gtggaataaa 300
 acggatgtaa actcagtgc aaaaaaaaaa aaaaaaaaaa aaacaaaaa 349

<210> 6670
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-E5
 <400> 6670

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 ccatcgttcg cctcttcatg gagcacggcg ccaaggtctg catcgcgac atccaggatg 240
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 actgcgacgt gacgtcggag gaggacgtga gccgcgccgt ggacgtgcg gcggagcgt 360
 tcggcgact ggacgtgat gtgaacaacg ccggcgtgac gggcgccaag g 411

<210> 6671
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-E6

<400> 6671

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gacattcttc taacgaagtg ttcaactggc ccgtcatggg atccaacagt aattgaaagt 180
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tgacttttat gttcttgat cgtgaaccgc agtgaacaac ggttggtgca agttccaggg 300
atatctttgg aagtggtaaa caaatgcgtc ttatttctat gtaatattag accccgtgcg 360
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<210> 6672

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-E7

<400> 6672

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tgggtgggcg tgcagcggca cgggcaggac ctggcggacc gcctcgcgca gggcttctcg 180
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ccgccaagc tcgtcatccc cttcgacctc gacctccccg ttgtcccctt cgtcgccggg 300
atgcgccgcg gggtcgggac cgtggacctc cccgccgtgg ccgtctcgtc gctcgctcag 360
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<210> 6673

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-E8

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cctcggccgc actgctaccg cgtcgccgac gaggcggagc ctcaaggcgg aggccaaaggg 180
cgagtggctc ccgggccttc cctccccgc ctacctgac ggcagcctgc cgggtgacaa 240
tggcttcgac ccgttggggc tggcggagga cccggagaac ctgaggtggt acgtgcaggc 300
ggagctggtg aacggggcgt gggcgatgct gggcgtggcc gggatgctga tcccgaagt 360
gctgaccaag gccgggctga tcaacgcg 388

<210> 6674
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-001-Q1-E1-F1

<400> 6674

cgccgcggcc cgtgcgcttc ggtatcctgg gctgcgccgc catcgcgca aagctggcac 60
gcgccatgct gctcgccccc ggccgagccg tcgccccgt cgggagccgc tccgaagtga 120
aggcccgctt ctccgccgc gacaacggcc tcgacgtcg caccaccgc ctccacggct 180
cgtacgatgc gtcctcgac gaccggaca tcgacccgt ctacatgcc ctccccacca 240
gcctccacgt gcgctgggt accgcagcc cgcacgtgg caagcacgtg ctccatagaga 300
agccacggc gctgtgcgc gccgacctg acaccatct cgcggcttg gacaccgcgg 360
gggtccagtt catggactcc accatgtgga tgnacaccc gcgcaccgcc a 411

<210> 6675
<211> 222
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-F10

<400> 6675

ccacgcgtca acggacgcgt ggggtcggac tggttccaat tatcaggtca gcgacagtgc 60
acagtttaca taattgctga ctcaaggtga gctaacaggt caatcatggg cgaaagatgt 120
acaagtgacg aatgaacgcg tcagtcagat cataatgcat atgagtcctg accacacggc 180
gatccagttc atgtgggttt gggaagagtt cttctacatc at 222

<210> 6676
 <211> 400
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-F11
 <400> 6676

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 accatggcgt ccctctcctc tgccgccatc accgcccctt ccttcacggc cgcgcccgt 120
 cgcgcagtgg tcagcaggag gtccctcacc gtgcgtgcct ctctccgcaa ggccactgcc 180
 accgcccgcg tggccgttgc cgccagcgtc ctgcttgccg gcggcgggcg catggcccag 240
 gaggtgctgc tgggcgcatg cgacggcggg ctcgctcttcg agcccagcca gttcacgctc 300
 aaggccggcg acaccatcac ctccaagaac aacgcccggc tcccgcacaa cgtcgtgttc 360
 gacgaagacg aggtgccgag cggcgctccac gcctccaaga 400

<210> 6677
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-F2
 <400> 6677

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 cgaccgcacg ctgcgcgagg ggctcaaggg tgacccacg tacctggtgg tggagcagga 180
 caagacgctg gccacctacg ggatcaacgc cgtgtgcact cacctcggct gcgtcgtgcc 240
 gtggaacggc gccgagaaca agttcatctg cccatgccac ggatcccagt acaacaacca 300
 gggcaagggtg gtccgtggac cggcgccctc gtcgctggcc ctggttcacg ccgacgtcga 360
 cgacggcaaa gtccctcttcg tcccgtgggt ggagaccgac ttcaggaccg gcgaggac 418

<210> 6678
 <211> 391
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-001-Q1-E1-D9

<400> 6678

accacgcgt ccgaaagcgc gcgcgcgcac gcggagaggc tcggagagct gaggagatg 60
gcacaagcca tggcgtccat gaccggcctc tcgcagggcg ttctgcccag caggcgcgcc 120
gccaacaggg ccaggacggc cgccgtcgtc agggcgctccg ccgaggcgca ggcgcaggcg 180
caggcggggc gccgcgccgt gctcgggctg gtggccactg gcatcgtcgg cggcgccttg 240
tcgcagggcg tgcacgccga gaccgtcaag accatcaaga tcggagcccc gccgccgcc 300
tccggtggac tccccgggac tctgaactct gaccaggcga gggacttcga cctcnccttg 360
aaggagcggc tctacctgca gccgctgccg c 391

<210> 6679
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C3

<400> 6679

agagaatgtc tccagtgagg ctcttgaggc tgcccgtatt gcctgcaaca agtacatgac 60
caagtctgca ggaaaggatg ccttcacact tcgggtccgg gttcaccct tccatgtcct 120
tcgtatcaac aagatgcttt cgtgtgctgg ggctgatagg ctccagactg gaatgagggg 180
tgcctttggc aagcctcagg gcacctgtgc taggggtggac attggtcagg tcctcctttc 240
tgttcgatgc aaggacaaca atgctgcaca tgccagtga gctctgcgtc gcgccaagtt 300
caagttccct ggccgcaaaa agattattga gagcagaaag tggggcttca ccaagttcag 360
ccgtgccgac tacctgaagt acaagagtga gggtagaatt gttcctgatg 410

<210> 6680
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C5

<400> 6680

aggtccaagc tctcccgccc tgacctcaag caggtctggg ctatcgcgga caccagaagg 60
 caggggtatc tgggtttctc tgaattcgtc acggcgatgc agctagtctc tctggcacia 120
 gcaggcaacg agattactca agatagcctt aagcgagatg atttgagcag tttgaatcca 180
 cctgtgatgg aaggtttgga tgcctactt gcgaaatcta agcatttggg gaagcgtggt 240
 gatccagaaa tggatggata tcctcaggaa caatctcctt taacaaacaa atggtttagc 300
 tcaaagtcac caaagaagat acctctgact gccgtcactt ctgttatcga tggcttgaaa 360
 aaactttata tcgaaaagtt gaagcctttg gaagttacat acaag 405

<210> 6681
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-C6

 <400> 6681

agacacacac agagagagac aagtgggttc caaagccaag tgtgtactag cagtctagca 60
 accagctagc tcgggcgcca gcaggcagcc atcatgtcgg aggagaagca ccaccacttc 120
 ttcaaccacc acaagaagga cgaggagcag cccgccggcg agtacgggta ctccgagacc 180
 gaggtggtca ccgccaccgg cgagggcgag tacgagaggt acaagaagga ggagaaggag 240
 cacaagcaca agcagcacct cggcgaggcc ggccgcatcg ccgccggcgc cttegcactc 300
 tacgagaagc acgaggcgaa gaaggacccc gagcacgcgc acaggcacia gatcacggag 360
 gaggtcgctg ccgcngcggc cgtcggcgcc ggccggtacg tattcgacga g 411

<210> 6682
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-C7

 <400> 6682

agcccacgcg tccgcccacg cgtccgcgga cgcgtggggc cgccccgct ccggaactac 60
 ttctctcgtg atcgccacia ccggttcctc tgcccgcgcc gcacgcccgt caggcaccgc 120
 gcctcggacg ccgacagggt cgcgtgcctc gcgtgtgatc tcgacgagat ctactccgcg 180

gccttcaacg gggaccgcac gccatacagc cccgccaagt ttctatatag ttggtggcag 240
catgcatcaa accttgcaag ttacgagcaa caggatgctc atgaattctt tatttccatc 300
cttgatcata tccatgaaaa tataaaggat gatcaacaaa agtcatatgc ccaaggccat 360
ggggattgtt gcattgctca cagagtgttt tctggtatcc tgaggtcaga 410

<210> 6683
<211> 418
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-001-Q1-E1-C8
<400> 6683

agcccacgcg tccgcccacg cgtccggcgt acgcgaggcg atcggagcat cccgtcccaa 60
gaggagaaac tccggccggc gacgcggggg aaaatgggga agacgccggt gcggatgaag 120
gcggtggtgt acgcgctgtc gcccttcag cagaagggtga tgccggggct gtggaaggac 180
atcaccacca agatccacca caaggtcacc gagaactgga tctccgccac gtcctcctc 240
acccccgtcg tcggcaccta ccaatacgcc atgtggtaca aagagcagga gaagctttcc 300
cacagatact aaatgggatg tctccaagt tgctgcggct tgctgcagtt gaattttcca 360
tgatgggttg tataatctgt caatgtcatt tctttgctca gttttagttc aaccatt 418

<210> 6684
<211> 382
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-001-Q1-E1-C9
<400> 6684

aggatagtgg tcgacagcac tatctgtgat gcggcgatat tggggtcac tctcatcgga 60
gagttcgagg atgtcaagca gctgaacgac cgtcgtacag agaagaacaa ggaaactgag 120
tgggacgtgc gtatcgacgt ggaggccgct agcggtcggt tcagagcact tttcctctag 180
cctgagctcc agtgggactt catgctgcct ctggtgaaga ggatcaatgt cagcgggcac 240
aagtacggcc tcgtctagcc tgggtgttggc tgggtcatct ggcggagcaa ggatgatctg 300
cctgaggagc tcattctcca tatcaactac ctggggacgg accagcctac gtacacgctc 360

aacttctcca aaggttcctg tc

382

<210> 6685
<211> 413
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-001-Q1-E1-D10

<400> 6685

accacgcgt ccgctgtttg ctttcggatt tcagcathtt ctggggctgt atgacttcaa 60
aagcaagaca catcaagatg cgtgctgccc tgagggtatg tgcagggctg cagtgtttgc 120
gctgcatgta aaggaagagc tgaactcatg gcctgagcag agcaccggc agaggacctg 180
actcacggtt cctgaagctg catccacgtg ccgtaccag tggatggaag aggccttgct 240
cacaggcttc tctgactggc acgacaagtg gagcataggt gacggcgggtg gcggcgggtgc 300
caactgtgtg acccggccta actgctgatg aaccatctg cagtcgtcca atttgtccat 360
cctcncccat ttcccctaag ctccgacatt gcgtaacgca ataaatacag tgt 413

<210> 6686
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-D12

<400> 6686

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ctgcggctgc tgatggggat ggcagcggcg gcggcgcccg cctcggcatt gcctcggggc 120
ggcggcggcg gcctgatgat ggtgcagcac gtcacctcg acgtcaacgg ggaactgttc 180
tcgggcgggg tcggcggcg cgccgtgccg ccggcgtcga aggccgcgat cgccgcgtg 240
aaggaggtga aggccgggga gggcgaggac gcgcttgccg agtgcgcat ctgcctggac 300
gcggtggagg gcaccggcaa ggagatgccg tgcgggcact gcttccacgg gcgctgcctg 360
gagcgggtggc tcggcgtgca cggcaactgc cccgtctgcc gccgcgagct g 411

<210> 6687

<211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-D2

 <400> 6687

 aggggttgcac tcgatcagac cgtttgggtct gcaatctgga acagtatcta cttcgtgggc 60
 ttaggtttcc ttcgggttga atcacctacc actatctaca gtgaactcaa gtctacattc 120
 tggcccatgc ttaccgctgg atggaagttg tggccttttg cacacttaac tacatatggc 180
 gtggttctctg ttgagcaaag acttctatgg gtcgactgtg tggagcttgc ctgggtcaca 240
 atattgtcga cgtactcaaa cgaaaagtca gaggcaagga attctgatag cacctccaca 300
 ccagatgctt caaaggacaa ctccagatag cagccctaga gaccttggag agctgattcg 360
 tccttccatc gcttcagttt atgtaaattg tacaattagc tgcagcaact ctgca 415

<210> 6688
 <211> 448
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-D4

 <400> 6688

 cggtctagta atccggctcg ccncacgcgt caggctgaag tgggtggcaca agatgagaag 60
 gaaagtggcc ttcgagcaac actaaacctg ggacacacat ttggccatgc tattgagact 120
 gggacaggat atggagcatg gctccatggg gaggctgtcg cagctggaac agttatggca 180
 actgacatgt ctaccgcct ggggtggata gatgactcca tcagaaaacg tgtggttgac 240
 atactaaagc aagcctaaact tcccattgca cctcctgaga ccatgaccgt agagaagttt 300
 aaaaacatca tggctgttga caagaaggtt gctgatggc tgttgagact catccttctg 360
 aaaggaccgc tanggtgctg tgtatttacg ggggattatg acgggaatgc actcgatgaa 420
 acctacatgc attctgcgac aactgaga 448

<210> 6689
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-D5

<400> 6689

gctcgatctc catctcgacc gtcgctcacc gggaagctac gctacgacga agcatggcgt 60
ccgtcaccgc ccgcgccccg gtcgcagccc tgcgcccgtc gtcgctcgctg gccttccttg 120
gccactctag ccgcctcggc cgcactgcta ccgcgtcgcc gacgaggcgc agcctaaagg 180
cggaggccaa gggcgagtgg ctcccgggcc ttccctcccc cgcctacctc gacggcagcc 240
tgccgggtga caatggcttc gacccgttgg gcctggcgga ggacccggag aacctgaggt 300
ggtagctgca ggcggagctg gtgaacgggc ggtgggcgat gctgggcgtg gccgggatgc 360
tgatcccga ggtgctgacc aaggccgggc tgatcaacgc gccgc 405

<210> 6690

<211> 395

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-D6

<400> 6690

agtgaagggtg gaactttgac tgaagcagtc cggagaacac cattcactgt agtcttgctt 60
gatgaaatag agaaagctca tccagatatt ttcaacattc ttctccaagt atttgaagat 120
ggacacctga cagactcaca aggacgcaga gtttccttca aaaatacgtt gattgtcatg 180
acatcaaagt ttggttcaac atcaatctca agcgggaagga ggagtatagg tttctcaaca 240
caaagggata cagaggagac cacctatgct gcgatgaaat cacttgtgat ggaagagctg 300
aaggcatttt ttcggcctga attgctcaat agattggatg aagtggttgt attccaccct 360
cttgaaaaga nccagatgat ggctattctc aacct 395

<210> 6691

<211> 405

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-D7

<400> 6691

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 gacaggaagg cctcgcagat caaagttctc cccttccatg ctgcgctgga tcaggcccag 120
 cgcacgcaa acatcaagga gttcctgaac aagcaaacgg ctgactccat gttccttggtg 180
 tgcacagata gggcgtcgcg gggcatcgac tttgcgaacg tgaaccacgt ggtgctcttc 240
 gactaccccc gcgacccgag cgagtacgtg cggcgcgctcg ggcggactgc ccgcggcgcg 300
 tccggcaacg gcaaggcggtt cgtgttcgcg gtgggcaagc aagtgtcnct ggccaggagg 360
 gtgatggaga ggaacatgaa ggggcaaccg ctgcacgacg tgccg 405

<210> 6692
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-C2

 <400> 6692

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 ggtcgctgcc atgcgtgctc ctctcctcc tctcgtgtg cttccaccac ggctgctcgt 120
 cggcgagggc ccacagacgt gccggcgaca tggaggggag catgagcacc gacgacagct 180
 cgatgataga gcggttccag cgggtggaagg cggcgtaaa caagtcctac gccacggtcg 240
 ccgaggagcg gcggcggttc cgggtgtacg cgcgcaacat ggcgtacatc gaggccacca 300
 acgccgagcg cgaggcgcg gggctcacgt acgagctcgg cgagacggcc tacaccgacc 360
 ttcacaacca ngagtttcat ggcatgtaca cggcgcccgc gccggcgag ctgcccg 417

<210> 6693
 <211> 408
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-B10

 <400> 6693

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 cgatggcccc cacgaagcag acggcgagga agtccactgg cggcaaggcg ccaaggaagc 120

agctggccac caaggcggcg cgcaagtctg ccccggcgac cggcggagtg aagaagcccc 180
accgtttccg ccccggcacc gtcgcgctcc gggagatccg caagtaccag aagagcacgg 240
agctgctgat ccgcaagctg ccgttccagc gcctgggtgcg tgagatcgcc caggacttca 300
agaccgacct ccgcttccag agctccgccg tcgccgcgct gcaggaggcg tccgaggcct 360
acctcgtcgg gctcttcgag ggacacaacc tctgcgcat tcacgcca 408

<210> 6694

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B12

<400> 6694

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tgtcttgcaa ctgcggatca agctgcggct gcggctcaag ctgcaagtgc ggcaagaagt 120
accctgacct ggaggagacg agcaccgccg cgcaggccac cgtcgtcctc ggcgtggccc 180
cggagaagaa ggccgcgccc gagttcgtcg aggccgcggc ggagtccggc gaggccgccc 240
acggctgcag ctgcggtggc aactgcaagt gcgacccttg caactgctga tcacatcgat 300
cgacgaccat ggatatgatt attatctatc tagcttgtgg tgggtggtga acaataataa 360
gcgaggccga gctggctgcc atacataggt attgtgtggt gtgtgtgaga gagagag 417

<210> 6695

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-B2

<400> 6695

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caagcgtcgg caccaatggc ttactaccag gaggtggact actgctcgga ggaggtgagg 120
tcggtggccc cggccggctt cggccgccac ggcggcggcg tccagcagca cgtcgtcaag 180
gagaagttcg aggaggtcga cacggtctca cgcgccggcg ccaaccacca ccaccaccat 240
ggtcaccaca gcggccacgg cttcgtggtg cgcgagacca gggtcgaaga ggacatcaac 300

acctgcaccg gcgaggtcca cgagcgcagg gagagcttcc tcgccagggc taactgagcc 360
gnccggcggc cggcattcac gcccgttcgt gcttgccctgc gtgccttatg tatgtct 417

<210> 6696
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B3

<400> 6696

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cttggtcttc acctccacca acacctacat ctccacctac cgaacatcag acccctccag 120
ctaccttgcc aacgcataaa cgagaagacg ggtagactt tgttgaaacc ctcttcacta 180
gtggagggtat cgaccatcac tcgtcactgt aacctgatgg tgatcggcga ccgtgagctt 240
tcatgttatt gtgttttgat acttgagaca tttattatga ctatgtatgt gatattgtct 300
cttattagta ctggatgaga tgtgtcttat tatgactatg gatgagactt ttatgatgta 360
attgatgaga ctatggattt aaatattggt atgtgattgt gtgtgag 407

<210> 6697
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B4

<400> 6697

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agggcgagcc tgagcgtgat ccccggcgag cgcgccatcc agtgcgcgca atgcaactgc 180
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gcgttccagc gcgcccgggg caagaagcgc gccgtcctgg tcggcatcac gtacgccggc 300
atgcgccaag gctgtggcga cctgaggggc cccgtcaacg acgtcaagtg catgaggaac 360
ctcctctgcc agcgcttcgg ctccccggc gaatgcatca tcatgctcac tgacg 415

<210> 6698
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-B5

 <400> 6698

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 atcgaggag caaatcactg ctacactgct caccgtagag aactttctga tgccgtagta 120
 gaagccatca catccagtga ggcaggggag accacaacct agatctgatg cagaacggca 180
 gcctgccttt ccaatcctgc aatgccgctc ttccatctca gtcacattgc cttatcacia 240
 tttttaaaag aaaacgagtt ctttgaaaat atcgtttgaa tctagacgtt gttaactcgt 300
 tgtatcatga catccttaat gctacgtttg gacgttgata ttggagagta tgaaattgaa 360
 ttgggttgaa tatcaaatca gacatgatag tgaaaa 396

<210> 6699
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-B6

 <400> 6699

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 agtgagtgat cgagctagct gagctccgat cctcgctagc taggataccg ccataccaca 120
 agtcttcttc acaagtttag gagtgcagc aacaagagat cgatggcctc tgccaccgtg 180
 ctcaagtcct ccttccttcc caagaagtcc gaatggggcg ccaccaggca ggccgccgcg 240
 cccaggccgc ccaccgtctc catggctcgc cgcgctcccg cctacgccga tgagctcgtg 300
 aagaccgcga aaacgatcgc gtcgccgggg cggggcatcc tggcgatgga cgagtcgaac 360
 gcgacgtgcg ggaagcggct ggcgtccatc gggctggaga acac 404

<210> 6700
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-B8

<400> 6700

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ggaggccatg cgggtattac tattctgcca ctcttctcgc aggccactcc tgcaagcaat 120
tcgttgcccc aagaagacat tgaggccctc accaagagga cacaagatgg tgggacagag 180
gtggttgaag caaaggcggg aaaaggctct gcaacgttgt ccatggcata tgctggtgct 240
gtttttgcag atgcatgttt gaagggtctg aatggagttc cagacattgt agagtgtctc 300
tttgtgcaat caactgtgac agagttgcca ttctttgcct ccaaggttcg gctcggcaag 360
aatggagtgg aggaagtgtc tggctctgggt gagctcaacg agttcgagaa gaagg 415

<210> 6701

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B9

<400> 6701

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tcggctccgc gctcatcaag atgctgctgg aggacggata cgccgtcaag acgacgggtca 180
ggaaccccgga cgacatggac aagaactccc acctcaaggg cctgcagcag ctggggccgc 240
tgacggttct ccgcgccgac atggacgagg agggcagctt cgacgacgcc gtcgccggct 300
gcgactacgc cttcctcgtc gccgccccgg tgaacctctc ggcacaggat ccagagaaag 360
agcagatcga gccgtccgtc cgaggcacgc tgaacg 396

<210> 6702

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C1

<400> 6702

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cccttcgtcc tcggacgcgg ccggccgtgc ccgtcttcgg gctgcggagg aacgggaacg 120

ggaacgccgg ccggcgggtgt acacgggtgtg gaagagggtcc agcatgggat tccagggcac 180
 cgacggcttc tgcgtgtacg acgacgccgg cgggctcgcg ttccgcgtcg acaactactc 240
 ccgcccggc aagctctgcg ccggcgagct gctgctcatg gatggcacgg gcacgcctct 300
 cctctccctc aggccacagc ttctcagcct gcacgaccga tggaactgct acacagcgac 360
 ggaagacgcc gccgtcgaca agaaggccac gtcgccggcg cagcagcaag 410

<210> 6703
 <211> 391
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C11

<400> 6703
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 cggcttcggc ttcgtcacct tctccacgga ggaggcgatg cggaacgcca tcgagggcat 120
 gaacggcaag gagctggacg gccgcaacat caccgtcaac gaggcccagt cccgcggcgg 180
 ccgtggaggc ggcggcgggtg ggtacgggtg tggccgtgga ggccggcgct acggcggtgg 240
 cgggcgccgt gatggccgtg gcggctacgg cggtgccggc ggctacggtg gcggcgccgg 300
 ctacggtggt ggtggcgggc gctacggcgg tggcaaccgt ggccggcgct acggcaactc 360
 cgacgggaac tggaggaact gagcgggtgg g 391

<210> 6704
 <211> 411
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-C12

<400> 6704
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 gtccttgctt gcagagatgt tgctgaagga tccctaccta ctcgaaacca cgaaggcgat 120
 caccgggttc cacgtcccag ccagcgcagc tcagggttaac acggggaaat ggctagacga 180
 aggcaacagg gttctttcag acatcggggc cgaagtgatc agaaggaaag gcaagcgaat 240

ggaggcgatg gtggatgtca gcgcgacacg tgccgctaac ctgaagctgc ggactctgga 300
 cgatctgggc aggggaactgg acagcgacat ccagtctctc cacgtcncga ggaaaattca 360
 gcaacggggg gatgaccaca gcacagctga gaacctgagg atggctctcc g 411

<210> 6705

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A9

<400> 6705

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 tacgccgtgt gcgcgctcaa ggtgcaggtc atcgtggtca ttggccacag ctgctgcagt 120
 ggcatcaggg cgctcctctc cctcaaggtc ggcgcgcccg acaacttcca cttcgtggag 180
 gactgggtca ggatcagcag ccctgccaat accaaggatga agagagagca cgcacgggtg 240
 ccgttcgatg accagtgtc catcctgcag aaggaggccg tgaacgtgtc gctccagaac 300
 ctcaacagct accccttcgt caatgaaggg ctggccggcg ggacgctcaa gctgggtggc 360
 gccactacg ac 372

<210> 6706

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A1

<400> 6706

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 ggccggaggt ggtgggagga cgccaaggcc aaggagtgcg gcctccacaa gggcaacatc 120
 gacaaggacg cccaggcggc ggccccagg tccgccaacg gcaacggctc ggcgggcgcc 180
 ccggacatct tcgagagccc cgccgtcgtg tccctacccc gcaccgggat ccagaacctg 240
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 ttctgccagg ccatggaggc ctctacgtg gagctggccg agaagctggc ggggtccggg 360
 gtgaagggtg ccaagttccg cgcggacggc gagcagaagc cgtttg 406

<210> 6707
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-A10

 <400> 6707

 acccacgcgt ccgccgctct tctgggggat caccgccgac ggctgcgtcg ccttctccga 60
 cgacatcgac atgctcaaag gctcatgcgg caagtcgctc gcgccgttcc cgcaaggctg 120
 cttctactcc aacgccctcg gagggctcaa gtgctacgag aacccaagc acaagggtcac 180
 cgctgtcccc gccgacgaag aagagatctg cggtgccact ttcaagggtg tggaagggtc 240
 tactgtcctg acggcgctgc actgatctat catcatcagg cggaggcgat gcgatgatga 300
 tgcagaactt tgtacatgcg ttggtggatg gtggtgtaac atagtggctg ccaacaagtc 360
 atgctcatgc aaaccgatga atctatctct gtatcatcga tctcggttgc ttg 413

<210> 6708
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-A11

 <400> 6708

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 aagccgtcca tggtagacgc cggcgcggag gccaaaggaca gggccacccc ggagcagggtg 120
 gccgcgtaca cctcaagct cctccaccgc cggatcccc cctccgtgcc cgggatcatg 180
 ttcctctccg gcgggcagtc cgagggtggag gcgacgcaga acctcaacgc catgaaccag 240
 gggcccaacc cgtggcacgt gtccttctcc tacgcgcggg cgctgcagaa cacctgcctc 300
 aagacctggg gcggccagcc ggacaacgtc aaagctgcgc aggacgcact gctgctgctc 360
 gccacggcca actccctggc gc 382

<210> 6709
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A12

<400> 6709

accacgcgt cgcgccacgc gtccgggcac agatgtaaaa gtatggtttg gaaagggtga 60
agatctgcca gtttacttct tgggaccaca aaatggcatg ttttgggttg gatgtgtcta 120
tgggaagaat gatgatagta gatttggctt cttctgtcat tctgctctgg agtttctgct 180
ccaaagagga tcttctcctg atatcataca ttgtcatgac tggtaagtg ctctcgttgc 240
ttggctatac aaggaacagt atgctcttaa tgggatggga aatggtcgga ttgtatttac 300
catccacaat cttgagtttg gagcgcatca cattggcaac gcaatggcac attgtgacaa 360
ggctacaact gtctctgata catattcaaa ggaagtggct ggacac 406

<210> 6710

<211> 389

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-A2

<400> 6710

aggcatccac caaattaaac cgccggcgcc tccacttcgc gttctcgct catctcctcc 60
cgctcaggat cggcgggcga aggtaaggca agatgtacac cgcgagggaag aagatccaga 120
aggataaggg ccttgagccc tccgagttcg aggactccgt cgcccaggct ttcttcgacc 180
tggagaacgg taaccaggag ctcaagagcg acctcaagga cctttacatc aacggtgcta 240
tccagctgga tggtgccggg agcaggaagg ctgttgtgat ccacgtcca taccgcttgc 300
gtaaggcctt caagaagatc catgtcanga tcgtcangga gctggagaag aaattcagcg 360
gcaaagatgt ggtaattgtt gccacaaag 389

<210> 6711

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A3

<400> 6711

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tccatttgca tccaaattaa tgccttgatg ttactacctt ctacgtttac attacagtac 120
 tttgggtgct gctgctttga cccatcctcg gctttgtatc ctccctcctgt cctccatata 180
 gcttttgccg aaatgacgat gacgacgggg ctatgtgcat acaaaataaa catgttttaa 240
 gatggggaaa aaagctatag atacctagcc ttgagggcta gtttggaac accattttct 300
 caaaggaaat aaactaattt cttttaagaa aatgaaaatt atttggaag acgaggatgt 360
 caaagtagcc ctaaataatta gattcctccg ctggcactgg caggcagcta 410

<210> 6712

<211> 409

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-A4

<400> 6712

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 anagatattg atgaggttat tcttgttggt ggctcaacta gaataccagc tgttcaagag 120
 cttgtcaaga aaatgacagg aaaggacccc aatgtgacag tcaaccctga tgaggttggt 180
 gcacttgagg cagctgtgca ngctggagtt ctgtctgggt atgttagcga cattgtactt 240
 cttgatgtga ccccttgtc cctaggtttg gagacactgg gtggtgtcat gaccaagatt 300
 atcccacgga atacaacctt gcctacctca aagtcggaag ttttctcaac agcagctgat 360
 ggccagacta gtgtggagat caatgttctc caangagaaa gagagtttg 409

<210> 6713

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A5

<400> 6713

gagatcacgt cgcaagaacc tgaacagagg taattgggaa attacccttc cccttcttcc 60
 aaccaagccc ttactatata gggagttgga atttatactg cgcagtggcg gacgcggaca 120
 cgatggcgct ggacgacatg cagcgcgacg aggtgttcaa cagggacaac atcccacgt 180

ggctgtccta cgcggggtac gccgcgctga gcctgatcgc ggtgatcgcc atcccgatca 240
 tgttccggga ggtgaggtgg tactacgtgg tggtagcgta cgcgctggcg ccggcgctgg 300
 ggttctgcaa cgcgctacggg accgggctga cggacatgaa catgggggtac aactacggga 360
 agatcgcgct gttcgtgctg gcggcgctggg 390

<210> 6714

<211> 415

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-A6

<400> 6714

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 gtgcagtcgg ccgtctctag gtcgtcggcg aggaaggcgc ccttcgtcgt cagggccagc 120
 tccagccctc cagccaagca aggtgccgac aggcagctgt ggttcgcgtc caagcagtcc 180
 ctctcctacc tcgatggcac gctgcccggc gactatggct tcgaccgct gggcctctcg 240
 gaccgggagg gcaccggggg cttcatcgag cccaagtggc tggcctatgg cgaggtgatc 300
 aacggccgct acgccatgct gggcgcggtg ggcgccatcg ccccgagat cttcggcaag 360
 atgggcatca tcnccccgga gaccgcgctg ccgtggttca agacgggcgt catcc 415

<210> 6715

<211> 102

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A7

<400> 6715

agaaaataaa taaaaaaga aaaaaaataa aaaaaaaaaa gaaaaaaaaa ataagataaa 60
 aaaaaaaaaa ataaaatata ataaaaaaaaa gagataaaat gg 102

<210> 6716

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A8

<400> 6716

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cagcccttca tccaggaaga ccacatgttc cagaagatca tggacatctg catccagcgc 120
ctccgcaagt gctactgtgg gctgacgccg caccacgtcg tctccaagtt cgacgacaga 180
acgtccacgc tctactacaa tgtcgccgag cccgaggacg tgaactgcag cgccgcctga 240
tgtaatatga tgtgaggggg agggggagcc accccagcat ctactagtct aatttttgct 300
gcgcagaagt ttcattgatgc agcagtgtta gtcgtgcgat tactgagagt gaaatactag 360
tggcagactg cgcgaggcaa tagagttgcc gagcctgtac atatacgtg 409

<210> 6717

<211> 229

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E4

<400> 6717

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gggtatacaga gggatacgcc gagagtaggt cgtgcccgcg ctgcgcgacg ggcggtcaca 120
cactgcaaga aattcagagt cacacgtctc agcccgggca acacacacac atgcacacgc 180
gcacgctctg tgccgaacag gtcagagaca cacactgacg gcagtcaca 229

<210> 6718

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E5

<400> 6718

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agtaagcacc agatacctcg ctgagaagtt cccatcagct caagctgttg ggctcgacct 120
atcaccgtagc tttcttgctg tggcggcaca aaaggaagaa aaactgtcac ggccaaagcc 180
tattcgctgg gttcatgcca atgggtgaagc gaccgggctg tcttcagatt catttgacct 240
tgtctccctt gcttatgtgt gccatgagtg cccagcacga gcaatcacgg gattagtgaa 300

ggaagcattc agggtccttc gcccgagg aacaatcgcc ttaactgaca attcccctaa 360
atccaaa 367

<210> 6719
<211> 365
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E7

<400> 6719

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tgagaagatg aagaaatatg cttctgttat ccgtgtcatt gtcataccc agattaggaa 120
gatgaagggt ttgaagcaga agaaggctca cctgatggag attcagggtca atgggtggtac 180
cattgctgac aagggtggact atggctacaa attctttgag aaagagggtcc ctggtgatgc 240
tgtcttcag aaggatgaga tgattgacat cattggtgtg accaagggga aaggttatga 300
gggtgtggtc actcgttggg gtgtcacccg gcttccccgc aagaccacaca aggggtctccg 360
caaag 365

<210> 6720
<211> 335
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-F1

<400> 6720

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gcgtgggcgg acacgtgggg ggttgctttc caggtcacat tgggtgttcac gaagtcttcc 120
aagtcatcaa ggtcctgggt actccaacag tggaagattt tcaatgcatg aaccggaatt 180
acacacagtt taagttccca caaatcaaag ctcacccatg ggacaatgta ttcaacaata 240
ggattccgcc ataacctgtt gatctggtct ctcagctact ccagtactct ccaaactctga 300
aatgcattgc tgtggatgcg catgttcacc cattc 335

<210> 6721
<211> 391

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-F10

 <400> 6721

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 atggcttact accaggaggt ggactactgc tcggaggagg tgaggtcggt ggccccggcc 120
 ggcttcggcc gccacggagg cggcgtccag cagcacgtcg tcaaggagaa gtctgaggag 180
 gtcgacacgg tctcacgcgc cggcgccaac caccaccacc accaccatgg tcaccacggc 240
 ggccacggct tcgtggtgcg cgagaccagg gtcgaggagg acatcaacac ctgcaccggc 300
 gaggtccacg atcgcagggga gagcttcctc gccagggcta actgagccgc ccggcggccg 360
 gcatccacgc ccgttcgtgc ctgcctgcgt g 391

<210> 6722
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-F11

 <400> 6722

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 gagccccgag atggaggtct cactcggtga gcgtgatcta cggtttatct ccttcagcac 120
 tggtcgtcgc ggctgcatcg ctgcagctct tggcactgat atgaccatca tgctcttcgc 180
 taggctcctg caggggttct cttggagcaa gatgaccggg gtggcggcca tcgaccttta 240
 gcgagtccag gcacaacact ttcatggcac ggccactcgt gctacaggct aagccacggc 300
 ttccagcgca cctctacccc gggatcttgc tttgtaagta gtcccaaata acggctgagc 360
 atgtagaaaa tttcaccact tatacatgct 390

<210> 6723
 <211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-F12

 <400> 6723

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggaggagaa gaacaaaagg ttaaaaagtt 120
 taattaaaca taaatgcaag gttgtaagct tttctatagt gtaactaaat ttaatttcat 180
 ggggggtggt tttaaaattt ggtgattggg aaacactggg ggttttgcat ttaaccct 240
 ttgcagcatt atcccttttc gcaatctggg gtattttttt aaaggctcgc acggttggcc 300
 cttccgaaat tttgaccatt ttgaatggtg aatgggaccc tcctttttcc ggggt 355

<210> 6724
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-F3

 <400> 6724

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 tggacaattg cgggttcctt gacctcaaaa atgttcctgg aaaaccccaa cctggcttca 120
 atccttacct gcgatgagga ccttgagctt ctcaaaggct gtgcttgctg cctgtccaag 180
 aagaggacca agtgctcacg ccgggtggcc aagccacatg ctggggtgaa gctgtgaagc 240
 tcatgttggt ctttctactg cagacgcaca atggatacta cagatggaga aataactaaa 300
 gcacagactc ctcagctgta cattagtata ggtttatatt agatacccat ccattcattt 360
 cctcggtgtc tgctcattgg gttttttttg ctgagctacc actgatggga actaccctgn 420
 gtgatacggg tggt 434

<210> 6725
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-F4

 <400> 6725

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 ttccgcctcg ctcaggctta tattcattga tggaacacaa ggaggcgggc tgcaaccacc 120

cggagggccc aatcctatgc atcaataact gcggcttctt cggcattgct gcaacaatga 180
 acatgtgctc caagtgccac aaggagatga taacgaagca ggagcaaggc cagctggctg 240
 cctcctccat cgatagcatt gtcaatggcg gtgacggcng gaaaggacct gtaattgctg 300
 catctgtaaa tgtggcagtt cctcaagttg agcagaagac tattgttgtg cagcccatgc 360
 ttgtagctga aaccagcgaa gctgctgctg taatcccca 399

<210> 6726
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-F5
 <400> 6726

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 ccaacatcat tatcaaaact gaagctccta gtgtaataac tgaagcttct gattgaaaga 120
 gaactattga actgggtaag gtacatgaac catgttcaat ggactccatg gagccatgca 180
 acacatttcc atctggagtt tcctgcgaag tgatgccaaa tgtagacact aacgaggaga 240
 agaatgagct tgaagagtca tgtattacca cagtgaacga agcgcacgaa caagggaaaa 300
 ctgagggaca gattgaaatt caagtagcat catcgatgga tatgataagt gatgaagctt 360
 taacagctga caatcaatac catggaattg gagaatcaaa tg 402

<210> 6727
 <211> 344
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-F6
 <400> 6727

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 gttcgcatgc ttcgaaaaaa cagttgaact tctgtataag catgtggtgc ccaaaccacg 120
 ttctgaatgc accaaaggag aacagttggt ggtaacgttc gccgccggat acattgccgg 180
 tgtcttctgc gccatcgtct ctcaccctgc ggacaccgtt gtatccaaac tcaaccaaga 240

aaaaggctct tctgccctag acgtcgccaa aaaggttggc tttgccggtc tctggaaggg 300
attgggtcct cgtatcatca tgatcgggtac attaancgcc gcc 344

<210> 6728
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-F7

<400> 6728

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agttatactg cttatgcttt tctttcttat agtaatatcc tccgtctcaa aataagtcaa 120
tttctagaat cacttaaagt caaattatct taagtttgac caattttata ggaaagggtac 180
cgtcgtctat gtttctatga caccaaatac gtacattatg aaaattatct tatgggtgcat 240
tagtgacact aattcagtgc cgtgctcttt ttatgaattt ggtcaaactt aaaaatagtt 300
tgatttaaga taactctgag aaattgattt attttgggac agagaatggt tctgggttgt 360
cttgtaaata cagttcttat tattagagta tatgatgact aggaccggtt taatccgaat 420
tatataaa 428

<210> 6729
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E11

<400> 6729

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ccatgtgcaa ttacacagc ctacaaatga agttgaaggt acctgaggat gaaccactgc 120
aaactaacat cagggcatct ctactgtggt ccgagaaaga aagttttgaa gagtataatg 180
agtcctttat ccttgagcgc ccagaacgac tctcatttgc tgcgtaccaa acagtttcag 240
gcatgtcaga tgaacttctc actgtgcaaa actacaagat acaaccaatg gattcgacag 300
acacccttga aaggctgaac actggtacca attttgtaaa ccataccacc ggaatgatac 360
ccgcaaggct tgccattcaa ata 383

<210> 6730
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-C5

 <400> 6730

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 ttccagaaag tgaagaggga gcacggtgcc ctgaggcaga aactagaggc ctatttccag 180
 ctgctatgac aagctggtcc tgctggagct gccacaagc ctggatgtaa gaactaggag 240
 ttgcaggaaa acggattatg acccaagaag atacctcact acaactgact ggccccggtgg 300
 ccctgctgcg cagcaattag gggtcagcat acgaagcgaa acaagagatg atatgcatgg 360
 atatgcacaa aactgtaata agagattgtt ttttc 395

<210> 6731
 <211> 294
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-C6

 <400> 6731

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 tagaaggaaa gtttgcactg ctcgagaatt catctgtcca tgatgatttt tcacagctga 120
 aaaaagaact ctcggaagc tctttgaaag gggagctccc atcaagcaaa agagcggcca 180
 gcaactcaag cgccggggcg cctttccccg acctagagat tgagagcgag ctaaacgagc 240
 tgcggaggaa gggcaaagaa tactagagag tatagactct ccaccaaaaca tctt 294

<210> 6732
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-D1

 <400> 6732

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ccagctcacc accggcctcg agtccgcctg gaacaagctg aggggagtcg atgtattgac 120
aaaggaaaac atagctgaac caatgcggga tatcagaaga gcacttttgg aggccgatgt 180
aagtttgcca gtagtaagaa gattttattga gtctgtaagt gaaaaggctg taggcactga 240
tgtgatccga ggtgtccgac ctgaccagca gttggtgaag gttgtgagtg atgaactggt 300
acaactgatg ggcggggagg tatcagattt ggtgtttgca aaatctggac caactattat 360
attattggca ggtctgcaag gtgttggaag aactactgtt tgtgcgaagc ttgccttcta 420
tctcaaaaaa ctgggc 436

<210> 6733
<211> 382
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-029-Q1-E1-D10
<400> 6733

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ctaacagcag tggctaccac gatattaacc gtcgttgccg ttcgtgcgcc ttttgcgagc 120
gaaacacatg cttccattag tccagattgc tcacttgctc caatctctat tagtctacac 180
ttcatcccat catttacgtc agtggccatc gaagagccac ctgtgcatcc ctatacggta 240
caagaggcga ttgcggccag cgtcatagtc caggcagttg ccgagttgca agtgtaagcc 300
ttgcgacatc tcatagtaaa cgccatcgca atgcactagg tccatgagta tcgaccagca 360
ctgaaccacc taaccatggt ga 382

<210> 6734
<211> 197
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-029-Q1-E1-D11
<400> 6734

acggacgcgt gggaagcggg cgcccccgct cgtcgcgttc ccccgcgac gtacaggtgg 60
cgaagtcgcc tcgtgctatg cataacaggc agtccttgat ctccatgaga attatgctaa 120

cgttagatgc actggcatta gtctaggata ctcaattgca cgtatttcta tcggcctaca 180
cttcttcaca ccattta 197

<210> 6735
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-D3

<400> 6735

gcgtccaacc acacgtccgg gcagaagcaa ttcattcttct ccacaaccaa caggaggacc 60
ggcggcggaa ggaggcacgg aggggcaagg accttcaagt tcccttgctc cttcaaaaac 120
ccgttggttaa ttggcctgcc ggaaaactca ggttgcggaag agagcacctt catgcgcccc 180
gtcaacaaac ttctttccgt gggccccccg agcccgccca aaggggccgga accccggact 240
caaacacgct caacagtgc accaagacag tgatatgcct cgacgactac catttctctg 300
aacaggaacg gcatgaacga taaagggtgtg accgcccctc accctaaggc caacaacttt 360
gatc 364

<210> 6736
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-D4

<400> 6736

gcgtccaagg acacttgggt gacccttca aggtcctgga caaaaggga ttgggcaacc 60
tggtgaattt tgctacaaaa aggggccgca aagctaggcc taacttgaag gtgggcattt 120
gtggaaaaaa cggtggaag ccttcgtctg tggccttctt cgcaaaggct gggctggatt 180
acgtttcttg ctcccccttc agggttccaa ttgctaggct acctgcacct caagtgcctg 240
tctgaggctg cctcctccgt tggaaccgg attgcctgct gctgggtggat gtgggtgatca 300
acagtattat tacacagcca tgctaagtga acattactag tagcagtgcct cataaaagct 360
acaatcccat ctcccccttt tttccaatca 390

<210> 6737

<211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-D6

 <400> 6737

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 gaggagctgc tgccgctgct ctccagtctc caccgatggc gatcaagaac atgacggtgg 120
 cggcgacgac gcggtcgctg gacgcggaca tgacggtgga cgagttcaag gagtggctgc 180
 ggcggttcga cacggaccag gacgggcgca tcagccgca cgagctgcgg cgcgccctgc 240
 gtgccatccg ctcccggttc acgggggtgga ggagcaggca gggcatcagt tacgccgacg 300
 ctgacggcga cggctacatc gacgacagcg aggtcgatgg cctcatcgag ttcgcgcaga 360
 agaactcggc ctcaagatcg tcgcctactg atctcacatg gggcgcgggc cgcggccgtc 420
 ggggggtgg 429

<210> 6738
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-E1

 <400> 6738

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 ccgccattgt cgcccgaact ccgccgtggg tgctggccgg gcgccgggtc ccccgtaaac 120
 gacgtcctcg cctcgctccg ccagctccgc ctgagcagg ccaactcgtc cccgtcgggc 180
 gggtggtgcg gctaccctgc atccgcggtc gcgtacggat cgcctacggg gggcgcgctc 240
 tacggcctgt cctccacccc gaggtccacc gccggctccg gctacatggc caacctggac 300
 cctctcgacg tcaccttcgg cggcgacgag gagcccgtgg agagggtgga gtccggccgc 360
 gcactccgcg cg 372

<210> 6739
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C3

<400> 6739

cgctccgacaa cacgtcggcc aacccttccg gaattattta acctaacata acaaccaaaa 60
tggcaacgga atttataaca aaaccaacca aaaatgcccc tggggcaaca acaaccctcc 120
aattgcttcg ggtccaaaca tttggtaatg gatttggcat ttaacaatat tgcacatgtc 180
aagagtgaat actttcaaac caatggacac tattgctcta catttgatgt tgccattgcc 240
aaggtttggc aagctaggac aagggaatc aagtacgaac caaatttcaa ggtgcatgtt 300
tgcttctttg ccaacactcg ccacctctc acacatgtgc tacccaaggt tggtaggttc 360
tatggaaatt gcttctatcc agtgactgtc acagcaactg c 401

<210> 6740

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-A9

<400> 6740

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taaaatatgt cgaaacacgg gcaaaaaaag tataaaatgt acgaagctta agaatgatca 120
tgaagggtcaa gctattgctg actgggaaag atgcccttct ggatgaagat tataaaatgg 180
gggagggccc aaatgggtggg gtggttgcaa attgtgccca attaaccttg atagtgcctt 240
gctgattcac cataagtcgt atgctgggggt attgcctttt gtacttccgg atgggtggac 300
agtagcagtt ttcaatatgt acgacctgct taggggaatt ctgttggtgc tcgagttcaa 360
caacttccat gtgcttttgt tttaccacct gg 392

<210> 6741

<211> 209

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-B1

<400> 6741

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agcattcacg acagcctgat cgaggctggt gtccgcgtcg agtccgacta ccbtgagggc 120
tactcccccg gatggaagtt caacgactgg gagctcaagg gtaatcctct tcctaaccaa 180
ttccgtccca aggattccca aaaaggttt 209

<210> 6742

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-B12

<400> 6742

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aacgggtgga caagccactt ctggaccaga ttgtaagagc ttcatatgat cctgggtgctg 120
caaaagtcct tgagagtgtg ttcaacttca atctttcaat tcctcttaac ttcttatttg 180
attcttttgg aggggaagata ttagttatcc aggggatgaa agacccctt acaaaatctg 240
aggcatttgt caccatgctc cgagaacatt gcagcaaggt tcaaatacaga gagttaaatg 300
caggtcatgc tccacatgat gaagttccag atgaagtaaa taccatacta tgtaaatggg 360
tggagcagat tgaagttaag ccagccctgg agaaagacaa ggcaatatag gtaacattta 420
gaat 424

<210> 6743

<211> 427

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-029-Q1-E1-B6

<400> 6743

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gctcgctcgcg gcggcgcccc cacgggcgtt cttctcctcg tccccctacc agccgccccca 120
gccggagggg ttctcgcagc accgcgagta cggctctggc cccatgggtca tcgagaccac 180
ctcccgcggg gagcgcgcct acgacatctt ctgcgcctg ctcaaggagc gcatcgctctg 240
catccacggg cccatcgccg acgacacggc ctgcgtcgtc gtcgcgcagc tgctcttctt 300
cgagtccgag aaccgcgtca agcccgcca cctctacatc aactcccccg ggggcgtcgt 360

cancgcgggg ctcgccatct acgacacccat gcagtacatc ggctgcccgt cacaccctct 420
 gcatcgg 427

<210> 6744
 <211> 443
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-C1

<400> 6744

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 ggcaaagcgc cgacaacgtc agcgtcgtcg tcgtcaacct aaggcggcgc ccgcgatcgt 120
 gatcgggtggg ggctccgatg gactagccgt tcttggttgg tttggtttcc tggccgtccg 180
 taagttcgaa tgggagagcc cagttcacct tcgcttcggc cgagcaatca tttgacaaga 240
 tgtcaaagcg aagatcgaa aaaatagtga gatccttagc agaattgcat gctacttcct 300
 ttacagtag tacagcagga ctattgtttc gttagcgttc ttttttttat ggggtgggtgg 360
 aggggtgcgtt tgtgatctgg tcggacagat catccgcct ttcttcccc ggtaaattct 420
 ccanatagaa aagcgcgtgc gtt 443

<210> 6745
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C10

<400> 6745

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 acaagggcct tgtcccgtc gccggctcca acaacgagtc gtggtgccag ggcttgagc 120
 gcctggcgtc ccgcgaggcc gcctactacc agcagggcgc gcggttcgcc aagtggcgca 180
 ccgtcgtcag catccctaac ggcccctccg agctcgccgt caaggaggcc gcgtgggggc 240
 tcgcacgcta cgccgccatc tcacaggaca acgggcttgt gccgatcgtg gagccggaga 300
 tcctgctgga cggcgagcac ggcacgagc gcacgttcga ggtggcgagc aaggtgtggg 360

ccgaaacctt ctacgccatg gcggagaaca acgtcatgtt cgagggcatc ctgctgaagc 420
cgt 423

<210> 6746
<211> 211
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C2

<400> 6746

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accagggtgt tcaagtgttc ccagagataa tggttcctct tgttgaaca ccacaggaaac 120
tggggcatca agtgactctt atccgccaag ttgctgagaa agtgttcgcc aatgtgggca 180
agactatcgg gtacaaagtt gggacaatga t 211

<210> 6747
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-A8

<400> 6747

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agtagatatg tctagactcg ggcacaatac tgtaactgt gcgagcttca gactgctcct 120
gaaggtcacg ctattgctga ggccgaagat gcccttctgg ctgctgatca tgacttgggg 180
caggcgccag tgggtggggtg gtggaaattg agcccaggaa gcttgagagt gacttgctga 240
agcagcagaa gtcgtaggct gttgattgcc tacgtatttc gggatatatg gagagtagca 300
cgaagcagta tgcaggacct gcttcggcta attctgccgt gcctcgactt cagcaatttc 360
cttttgcttt tgtatcatga cctggcacgt ccttggtgtg t 401

<210> 6748
<211> 262
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H12

<400> 6748

gcccacgcgt ccggcgccgc cgctccgac atcgtctctt cgtccccacg agcaaccgat 60

aatccgccgg cgctgagatg ttggtttate aagacctctt atctggcgac gagctcctgt 120

cggattcatt cacctacaag gagctcgaga acggcgctct gtgggagggtc gagggaaagt 180

gggtcaccca aggtcctgtt gatgtagaca ttggtgccaa tccatccgcc gaggggtggtg 240

aggatgaaag cgttgatgac ac 262

<210> 6749

<211> 304

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-028-Q1-E1-H2

<400> 6749

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cgcggcggta gcgctcgcgt ccttcccgtc cgcggcctcc acctccgcc cttcccgcgt 120

ctcggccagc agccaccgcg gtcagcggca ctccagggcc gcaaccgtca gatgtcccag 180

cacgtcggcc aacgtgtccc agggcgcgcc ggcgccggcg ccgccaagc cgcanatcga 240

gctcgagttc gtcgggccga agcccgggtgc cgacgggtcc ttcccgggtg accgggcgga 300

ggcg 304

<210> 6750

<211> 275

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H4

<400> 6750

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gccaaagcagc cgcggtgtct gtttgcagat caattcgagg caatatgatt ccatttgggc 120

ccgaaatttt agcatgctaa gagtcctcga tgtctacaga atctcgccaa cttcgatgcc 180

cattacaacg ggactggccc ggagatactg cgccagacga atggcgagat cgacgctttc 240

gtagcagggg ctgggacatg cggtacgcta cctgg 275

<210> 6751
<211> 234
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H5

<400> 6751

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ccgcacaacc ccggacgtgg tggcaggcga ccgatccgga tccatcatcc caagcttcct 120
ttctgtctcc tcttcatcca tctccacaac gataatcaag gaacgaatgc catgggttttg 180
ttctaacttg acccggacat catccgatgg ggtcttcaac atctcctccc cgct 234

<210> 6752
<211> 252
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H6

<400> 6752

cgggccgacc cacaagtccg acgggagtggt acgtgccacc atcagcggta tcattagtgg 60
ccgccgctgc gaccatctca tcctcctcgc acttgctcct cctctcccgcc catcaggcgg 120
cctccctaca atgcggcctc tcttgccctg gccatcccaa agggcccgggt acgggttacgg 180
ctcatgctcc tgccgctaag gacgtgccgt tcatggcgggt cgtggacact actgcagcgt 240
ccactgcggc tg 252

<210> 6753
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H7

<400> 6753

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tagtttcttc tactacacga cgacaaacat ggggaagcct gcgaagatcg gagagtgggg 120
tggatacgcc ggcgatcgtc gggatctgag ggctactccg gaccggctga tcgaggtgaa 180

ggtcacggcg gacaacagca gctgcatccg ctccatctcc ttcattctaca tcggagccga 240
 tggcaaaccg tacgaggagg ggccatgggg tttcggccat gctggcacgg agtacaagat 300
 tgatctgtgc aggttcgacg agagcttgac ggagatctcc gggaccacgg gccagccta 360
 caacattgac aatctggtea agtctctcaa attcgtcacc aacaaacgcy cttacggacc 420
 gtacggcagg gacgaggga cc 442

<210> 6754
 <211> 379
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-A10

<400> 6754
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 ggcgaggagc aggggtggtg cccgtgtccc cgccacaagg aggagcgtcc gtgtagctgc 180
 cgtcgtcgcg accgaggccg cgcagatcga ctacagctca agcgtctcgg tgttcccgat 240
 ggaggcctgc gacctgcttg gtggcgacgc gtgcaacggg cccatgttcc cggaggccaa 300
 gccgcctcg gcggcgggcg cggcgagcag gattgtggtc ggggtggaca gggactacct 360
 gtcctacgac gagccaaag 379

<210> 6755
 <211> 331
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-A12

<400> 6755
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 ggctccaccc ggcgagcgaa caatggaggc ggggggcgtc ggcctggcg cgcaggcgcg 120
 ggcggcgggc ttcggctcca gccggcaccg gggcggccta caggcgccca ccgggagcct 180
 gagagtcgct gacccggcg gacctgcggt cgctgtgcgg gctcgcgggt ccaagcccg 240
 cgcaccgctc cgactccgtg cgaagaaatc gtccggagggt catgaaaact cgcacaactc 300

cgttgacgaa gctctcctgt tgaagagaaa a

331

<210> 6756

<211> 315

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-029-Q1-E1-A3

<400> 6756

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ttggggccaaa aatatttgaa acacccccca acttaaaaaa tgcggtcagg gaggcaattg 120

aggggatgag ggtcgcacta ngtgcggctg tgattttaaa ttattgcttg caaggtctct 180

tccatccagc aaggaaagta cgagaagtgt attggaagat atacaactct ttgtacatcg 240

gcgcgcaaga tgcacttgtt gcttcttctc ctgccctgga agacgatggg gataacatct 300

ttagtcctcc aaaat 315

<210> 6757

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-A5

<400> 6757

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gctggggagg ctggaactgg tattgcagaa cttattgctc ttgagatttc gaaacagacg 120

aatgctccaa ttgaagagtg ccgcaagaag gtttggtctg tggactcaaa gggtttgatt 180

gttgactctc gtaaaggctc ccttcagcca ttcaagaaac cttgggcgca tgagcacgag 240

cccttgaaaa ccttgatatga tgctgttcag tccatcaaac ctacagttct gatcggggaca 300

tctggagttg gaagaacatt cacaaaagaa atcattgagg ccatgtcttc cttcaacgag 360

aggcctatca tcttttccact gtcaaaccga acctcgcatc ctgaatgcac tgctgaacaa 420

gcatataca 429

<210> 6758

<211> 225
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-A7

 <400> 6758

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 ttgcgcgtgc cgtcgctggg gaggccgggg tgcccttctt ctctcgctgc gcctctgagt 120
 tcgtcgagct ctctcgctgg gtcggtgcct ccagggtgcg cgacctcttc gagaaggcca 180
 aggccaaagc gccctgcatt gtcttcattg atgagattga tgccg 225

<210> 6759
 <211> 286
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-H10

 <400> 6759

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 tgctcacaca tgagacctac gtatgcctcc gttccttggt atgaggaaat atgcttgctg 180
 tcgttctccg tgggcgttgt tcctacaaat tcacttgctt tctgtctctc tctctatata 240
 cacactgtat aaaacaagaa cagctgttta tcctctcttc ttatat 286

<210> 6760
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-028-Q1-E1-F5

 <400> 6760

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 tttcaatgtg tcgtctgctt taaaaaattt aaagtcaaaa gcaatttaaa agcccattta 180
 gccgttcatt gattagcttc ttattctttt tgattcctaa ttttttaaaa aattatgttc 240

ctgacatttt gcttccgttt actccgaaat aagcaaaaaa attttttcgtc ccaaggggtct 300
aatttacgan aaaaacaaat tttatcgctc aatgtatata aaaaactgta aattanaaac 360
attttttaat gaatttgttt taaaaatata ttttt 395

<210> 6761
<211> 453
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-F6
<400> 6761

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aacgactcaa cgacgacggc aggcggtaga taaaggcgcg cgatgtgcga cgggcgccg 180
aggtacaggg gcgtgcggaa gcggccgtgg ggccggttcg cggcggagat ccgggacccg 240
gcgaagcgcg cgcgcgctctg gctcggcacc ttcgactcgg ccgaggccgc ggcgcgcgcc 300
tacgacgtgg ccgcgcgggc cctgcgcggc ccgctcgcca ggaccaactt ccccgcgctc 360
gccaccacct cccgccgccc cgcgcccacg tgcagctccg gctccaccgt cgagtcctcc 420
agcggggcccc gcgcggggga ccanggccca ggg 453

<210> 6762
<211> 354
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-028-Q1-E1-G3
<400> 6762

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aaagccaatt gtggaagggc caaattgaga aaccggtaac ctggaaaaaa ctaatttaaa 120
ataagttaag ttaataagtt aaaaaaagtt tattggagaa taaaattggt aatccgaatg 180
tttatgccac tttgatttga ttttaagcgt aagggaatct tctgattttg cggggagtaa 240
accactaaag gttcattggt tgatttttca ttatatgtgg cacagaaata ttttcccttt 300

gataaaacaa ctaagggagt tctatTTTTT tgacatcaag ataaaatact tttt

354

<210> 6763

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-G4

<400> 6763

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gcaagaacaa agagtgaag aagcacacac tccacaaggt gactcagtat aagaagggca 120

aggatagcct gtctgcccag ggaaagcgcc gttatgaccg caagcagtca ggatatgggtg 180

gtcagaccaa gcctgtcttc cacaagaagg ccaagaccac caagaagatt gttctgaagc 240

tgcagtgcc gagctgaag cactactcac agcacgccat caagagatgc aagcattttg 300

agattggggg agacaagaag ggcaagggca catctctttt ctaagcttct cgtccacctg 360

tcgggttttt gattttaacc tgtgggtcta ctactactgt tataaa 406

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<212> DNA

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<223> Clone ID: LIB189-028-Q1-E1-G9

<400> 6764

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gtcgcgctca actgccccgt gcacccggtg ccgtcgcata gcccgccgca cactccggcg 180

cccaagaacc tagtacagag gccggataca ctcggggaag gggcgctgga ctccccggag 240

gacctgtacg tggacgccgt ggcgggcggg gcgctgtaca cggccacgag ggacggctgg 300

ctgcagcgga tgatgacccc caacaacggc tcctgggagc ggtggcgctt cgtcggcggc 360

acgggcctgc tcggggtcgc gccgtccgcc gacggcacca tgctcgtctg cgacgccgac 420

aaggggcttt 430

<210> 6765

<211> 453
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-H1

 <400> 6765

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 atgggtggcgc cgggtggtgat tgcgtcggcc gggctgggca tgctggccgg cgtggcgatg 180
 gccaacccgtt ccctcgggaa cgggctcccg gcggcctcca ggtgggacgc gcgcccgcgc 240
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 gactccggct gccggacctg cgctgggttc gggaggatgc cctgccgcag ctgcggcggc 360
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<210> 6766
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-F4

 <400> 6766

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 actccgttgt taccaacaaa aaaaatcagc tggcgcacga ggatgctggt ggtatcagac 180
 tggacacgcc gattcatctt cggaagagac tcgagttgca tatgatcaag agggaaaaga 240
 ttttgctgtg acatatattc agatgaacga ggccagtaca gcctcttccc actttttttt 300
 agtctgattt cacataaatg ttcccctttt gttgttaagg aagaatctga cttcccctgc 360
 actttgtata gtgcaccacg aagaaattcc tttgtaccta ctttttcttt ttgagagagt 420
 tgcactgcac 430

<210> 6767
 <211> 436
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-D7

<400> 6767

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attattaagt ggtgcacggg gtcaaaagca gatctatacc atgttatgat ctacatgttc 180

cttagcccaa cagatgagat tggtgaaaac cagttgttta gtggccagaa gacagtgcag 240

cttgttctac ttctgcttgc tctgggtgtct gtgccttggg tgttgattcc aaacacctctt 300

ctattgaaga agcaacatca gcaaaggcat caaggtcacc agtacgcaat gcttcagggc 360

gttgatgaat cagtgggagc agagctgggg gaacatcatg aggaagcaca tgaccatgag 420

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<210> 6768

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-D8

<400> 6768

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gggatgaaat gattgacgag cactgcgata ctgatccagt gtgggtttcca gaaatgttta 120

aggattggta gtgggtggat ttcttgtaaa tttatctcaa acctaaattc gggttttatg 180

ctatagaaaa tagaaatact tcatgatgat gaatcatcag gttaagatcg atctaaacca 240

atccatttta tatatacata cgacatgcca acgggttaac aacttattag aaatgcaaga 300

cagccaatac gaaatgctag aaaatcggcc gc 332

<210> 6769

<211> 197

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-E4

<400> 6769

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cttcggcgaa gggcccaaaa aaaacggcgg caatcgcccc ggggctcttc ttaataacct 180
tacccccggc ttcttca 197

<210> 6770
<211> 440
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-028-Q1-E1-E7
<400> 6770

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ccggtgtgtg ggattctgct gcagatcgat ccgggcaccg gaagccaccg cctgcgcctc 120
ttctgccccg tctgccccta cgtctgcccc atcctgaaca agatcgtgaa gaaggcgagg 180
ttggtcaaaa aggaggtgga gcccatctcc agcacggcgg atgagatgaa atcggcccct 240
aagaccgcag ttacatgcca aagatgcaac catggagaag catacttcaa gcagatgcag 300
attcgatcag ctgatgaacc gatgacaaca atatacaggt gttgcaaaga agaatgccag 360
catgaatgga gagaggactg accatagcat tcgcactttg cttacacttc gctccctgtg 420
cttcttcagt tttgagtgtt 440

<210> 6771
<211> 388
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-E8
<400> 6771

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caccatgcgc aagaccgtgg gcaagcccaa ggtggcggcg tccggcagcc cctggtacgg 180
ccccgaccgc gtcaagtacc tcggcccctt ctccggcgag ccccgagct acctcaccgg 240
cgagttcccc ggcgactacg gctgggacac cgccgggctg tccgccgacc ccgagacctt 300

<210> 6774
 <211> 337
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C2

<400> 6774

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 cacggacgac cactccctcc acaacgcctt cagcacctac ggcgaggtcc tcgagtccaa 180
 gatcatcctc gatcgggaga ccagaggtc ccgcggttc ggcttcgtca ccttctccac 240
 ggaggaggcg atgcggaacg ccatcgagg catgaacggc aaagagctgg gacgccgcaa 300
 caaaaccgtc aaccaagccc aatctcgcg cgcccg 337

<210> 6775
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C4

<400> 6775

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 gtgctattgg gctcatgcct atgatcgatc agggcgagaa agatgataag attatagcag 180
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 cagtgaatga gttcctgcca gcgaaagatg ccatcaacgc aatcaagtac tcgatggacc 360
 tgtatggctc atacgtcatc gaaagcctga ggaagtgatc tccagctgct tgattgtggt 420
 tgtggatgct aca 433

<210> 6776
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C5

<400> 6776

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accgcgtccg gctccgtctc cgtctccttc gcccgcgcg ggcgggggct gccctccctc 180
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gcagcggaga gctacacgtc cgcgctgtca gagtgggccg tcgagaacgg caccctcgaa 300
cagacggtct ccgacctgga gaagctgggg aaggtcttcg cggacgaggc cgtcgccgag 360
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<210> 6777

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C7

<400> 6777

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accacgtacg aggacaagga tggcgactgg atgctcgtcg gcgacgtccc ctgcaagatg 180
ttcgtggcaa cctgccagcg ccttcgtctg atgaagggtt caccggccgt gaacttggca 240
ccaagagccg cccgatgagg cacacgccgt tgggcgttgg cacgcacca cgcactggcg 300
tcttcgagga aagggggaac tctgctggtc ttgcggacgc tcttcccgtc a 351

<210> 6778

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C8

<400> 6778

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attcctcgcc ttttgcgcct gagcagcatg atgattgtag taaatgaaat gaatagtga 180
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 ctgctgtaac gacaacttgt ccgcttcgcg ttctgtctcc tcattgttcc cgtttactga 300
 taaaacagca gaacctaatg ctttttgcaa actgtgtgcg attagattag atactctccg 360
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<210> 6779
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-D11
 <400> 6779

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 attattcgtg acatatcacg cacatttcca tctcatatat tcttccaaca aaggcatggt 240
 ccaggccaaa gatcattgta taacattttg aaagcatatt ctgtctatga cagggatggt 300
 ggatatgtgc agggaaatggg attttttagct gggttgctgc ttctttatat gaggtaggag 360
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<210> 6780
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-D4
 <400> 6780

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 actgctgctg caccgtgtga ctggatttgt actatatgcg gatgtatgaa ttttgcccg 180
 aggacctcct gctttcagt caatgaacct cgtactgagg atgctcttcc agctgatgcg 240

acaggttccg cttcacactt tgggagaagg ggatctgaac taggtccaac tcatgtttta 300
 gttgttcgtg gcttggatga aaatgctgat gaggaaatgc ttcggtacga atttgctaag 360
 cacgcaccat taaaggacat cccccttg 388

<210> 6781
 <211> 417
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-D5
 <400> 6781

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 cttggctact gatgaatggc taagggtccg tgaatgtgat ggtgtctatg caataggtga 180
 ctgtgctaca ataaaccaga ggaaagtaat ggaggacatt tcagaaatat tcagagtcgc 240
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 ctacgtgagg taccgcgaag tacagctcta ccttaagagc aagcagatga acggcatcgc 360
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<210> 6782
 <211> 440
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-A2
 <400> 6782

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 tgctatgggg acaaaaagga agaccaagag gcgtctagat tcccatattg acgaggaagt 300
 ccgggtgtct gaagatgcat acgtttcaga ggatgaggat gataatcaga gtgaacataa 360
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aggatgatcga cacaatgggg

440

<210> 6783

<211> 179

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A3

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<210> 6784

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A4

<400> 6784

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aacgaggaga accgccgagc gtacgagagc attgttggca ttgagcctga gttggtgctg 180
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gctgatgcag tctttgacga tgtgaaaggc atatttactc aactacggac cactcagga 420
agccaagggtg gcaatgcgag cagcag 446

<210> 6785

<211> 274

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A5

<400> 6785

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 gcacggggagt gttaccgtgt cacgccttat caggcgccgg agcggtgga tggggaccgt 180
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<210> 6786

<211> 223

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A8

<400> 6786

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<210> 6787

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-B1

<400> 6787

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 ccaccaacct tgggaaacat ctccacacta ggggtagttg atttttcagt gaatcaacta 180
 agcgggaagca ttcctaataa agtttggaac atcccaaaca taacagtgtt aagtctagca 240
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 cctcatctaa atatactata cttagattac aacatttttg tgggtacaat tccatcttcc 420

6786 6787 6788 6789 6790 6791 6792 6793 6794 6795 6796 6797 6798 6799 6800 6801 6802 6803 6804 6805 6806 6807 6808 6809 6810 6811 6812 6813 6814 6815 6816 6817 6818 6819 6820 6821 6822 6823 6824 6825 6826 6827 6828 6829 6830 6831 6832 6833 6834 6835 6836 6837 6838 6839 6840 6841 6842 6843 6844 6845 6846 6847 6848 6849 6850 6851 6852 6853 6854 6855 6856 6857 6858 6859 6860 6861 6862 6863 6864 6865 6866 6867 6868 6869 6870 6871 6872 6873 6874 6875 6876 6877 6878 6879 6880 6881 6882 6883 6884 6885 6886 6887 6888 6889 6890 6891 6892 6893 6894 6895 6896 6897 6898 6899 6900 6901 6902 6903 6904 6905 6906 6907 6908 6909 6910 6911 6912 6913 6914 6915 6916 6917 6918 6919 6920 6921 6922 6923 6924 6925 6926 6927 6928 6929 6930 6931 6932 6933 6934 6935 6936 6937 6938 6939 6940 6941 6942 6943 6944 6945 6946 6947 6948 6949 6950 6951 6952 6953 6954 6955 6956 6957 6958 6959 6960 6961 6962 6963 6964 6965 6966 6967 6968 6969 6970 6971 6972 6973 6974 6975 6976 6977 6978 6979 6980 6981 6982 6983 6984 6985 6986 6987 6988 6989 6990 6991 6992 6993 6994 6995 6996 6997 6998 6999 7000

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 <211> 300
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-B3

 <400> 6788

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 ggcgccgccc taatttataa ccagcaccat gcctgggctg acaagtggat cttctgggtc 180
 ggcccccttca tcagcgcagc gctggctgcc atctagcacc acctgatctt catggcgatc 240
 gcgttcagga gtaggtctta aaggatcaga tgctgctgct tcgacatgct gccggtcttg 300

<210> 6789
 <211> 297
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-B5

 <400> 6789

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 ccgtcacagc ttgccattga cctgaatgct cagggtctgg ctgcgtacgc catcatctgc 180
 caggagaacg gtctgggtgcc aattgttgag cctgagatcc ttgttgatgg ccctcatgac 240
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<210> 6790
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-B8

 <400> 6790

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 tcgagctctg ctgccttgca tctatctata tacctaacaat gcatatgctg ctgcttgga 180

gacgcacggc gtgcagatgc ccgacgcca cgcgtcggtc gtcggggcca tgacgcacag 240
 cttcgtccgg acgctggagt gccagccgcg cggggtcacc tacggccacc tgctcagctc 300
 catgagggcc atcatgaaga atcgcgccgg gggctgcgat ctgcacgggg ccatccgcg 360
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 ctctg 425

<210> 6791
 <211> 336
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-028-Q1-E1-B9

<400> 6791

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 tcaagatcat ggggtggatgt gacaaacaag gcttcccaat gaagcaagga gttctgactt 120
 ctggtcgtgt ccgccttctg ctccacagag gcactccctg cttccgcggt tatggcaggc 180
 gtaatggtga gcgcaggagg aagtctgtcc gtgggtgtat tgtgagccaa gacctatctg 240
 ttatcaactt ggtaattggtt aagaaggggtg agaacgatct gcctgggtta actgacactg 300
 anaagccaag gatgaggggt cccaaaaggg cctcca 336

<210> 6792
 <211> 448
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-028-Q1-E1-A11

<400> 6792

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 tgtatgcggc ggcggccatg gacttcgtgc tccaggctct gctgcgagtg gtgatgagaa 120
 gaagcatccg caggctgcaa gaggtcggtt acatcgccgt ggacatcggc acggctgtct 180
 tcgtggccgt gcgggtctcc ggcctcgtct tccgcgcggc gctgcccacg ccgactacga 240
 catcgtcgtc gtcgacgacg tactactact ccccggggac gtcctcctcg atcggcatgc 300

6791-6792

atgtccagga ggattaatta ttggcaggca ctanatgagc tagctagcta gctagggcca 360
aaagatgtat acttctcgcg ggggggcatg taagtaacaa agtcatatat ctgtgcgttc 420
ttttttgtgg aatcaaacta atttcgct 448

<210> 6793
<211> 135
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-G3
<400> 6793

agggaacctg aagcgttgca accggtcaat gattcatgca atggcagcct gctgcctgta 60
acaacaaaca agtattgatc ttattgagac cggaactgt attgcacatg gtaaataaat 120
gtacaattcc tccct 135

<210> 6794
<211> 412
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-G4
<400> 6794

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aaaaggccgc gcccgatttc gtcaaggccg cggctgattc cggcaaggcc gccacaggct 120
gcagctgcgg tggcaactgc aattgcgacc cctgcaactg ctgatcacat cgatcgacga 180
ccatggatat gattattatc tatctagctt gtggtggtgg ttgaacaata ataagcgagg 240
ccgagctggc tgccatacat aggtattgtg tgggtgtgtg gagagagaga gaaacagagt 300
tcttcagttt gctatctctc tctgcatgtt tggcgtcagt ctttgtgctc atgtacgtac 360
gtgtgtctac ctgcatgttg gttgatccga ttgcatctgc tgtaaccata ta 412

<210> 6795
<211> 368
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-G5

<400> 6795

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ttcggctgat tgatcctccc gtatcgtcgt cctccccgt gtgctacgcy tgcgtgtgag 120
agtgatatcg agcgccccgcc gtgttgtgcy cgcgtacgta tgtatgcgct cgtgtgatgc 180
acgaataagc gtggctacgt aatctatcgt atgtatacgt gtgtgtatgc atgtgcttgt 240
gtatgatcgt ggtacgagga ccgaaaaaat gtatgcaact ctgatttact tacatgttta 300
gttgtttacg tttcgccaaa agtattagta cccattatgt tatattttac taaaaaaagc 360
gaacatgg 368

<210> 6796

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-G6

<400> 6796

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tttttttttt tttttttttt tttttcaacg aaccccgaac gggaggatcat aaggatttaa 120
caaagcgtac tttacagaaa ctggaagatg taaaaaaaac tagataacag acagaaaaca 180
tccaaacctc ggcggggcccc ttaaaaaacc ccccaaaaaa cccaacaaga tgcccaaac 240
caaaaagggg agggaaaaaa aaaaggagaa aaccccggga aaaaaaaccc aatccaccaa 300
aaggggttt 309

<210> 6797

<211> 207

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-G8

<400> 6797

ggtgtagttc gtgtccctcg ataccagcgt ttactccagc tacaccataa gcggctactt 60
ctgctgcacg gtcgacatgt gggatgtgca gtacttcaaa ttcaaggat gcatgtacac 120
ggacaaggtc actaccggct tggattgtgt ctgtcacttg ttcgtcagca tgtgaatgtt 180

tctcggttc aacgacgtaa ttttcac

207

<210> 6798

<211> 139

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H1

<400> 6798

agactagttc tattcttcac tgtttttttg ctacatttac taaaatatga cctttgttca 60

tatgatctac tggttaattct tcgaccttc aatttcacaa aacttgcaac tatttttatg 120

ctctgcatcc taccaaaag 139

<210> 6799

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H3

<400> 6799

ggtgttcggg gggcaagggt tcgtccctt tgtgcttgt tccccggtgg aaaggattgt 60

ccctgaatct cacctgggca ctgtgacgga ggctgagcgc agttgaaatg aggcaagagg 120

gatgccgaca attttctgta gatcttcaga cagataccac tcatactcct attttaattt 180

cagaatccac tgggtgcgaat tggtctttgt agtaccttgt gcatatagtt ttatatagag 240

ctgctacaca agctgctgta aatttctggg aggcaactccc aactgtagat tactgcaatt 300

catctgtaaa tttcaatctt gttcaagaaa aatga 335

<210> 6800

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H5

<400> 6800

agcccacgcg tccgcccacg cgtccgcca cgcgtccgag ccatcgacac gatcgcgagc 60

gcaagcacgt acgttgctcg aagctcaagt tagaagaagc accagtgcct gatcgatggc 120

ggcccaggct ctctctctcg gccggcagct gctggggccgc cccgtgcagt cggccgtctc 180
taggtcgtcg gcgaggaagg cgcccttcgt cgtcagggcc agctccagcc ctccagccaa 240
gcaaggtgcc gacaggcagc tgtgggttcgc gtccaagcag tccctctcct acctcgatgg 300
cacgctgccc ggcgactatg gcttcgaccc gctgggcctc tcggaccgc 349

<210> 6801
<211> 372
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-027-Q1-E1-H6

<400> 6801

cgctgtcccc atgtcaggag gccctgctct tcttcggtcg gttttaaggc ctgtttggag 60
aggagcctac ggcgcgcag cccgccacac ctgcggcggc cgattttgggc gccacacccg 120
cggcagccgg agtgtggcgc ggtgtggcgc ccgagccagc ccaccaaaca ggcccttaga 180
tagccaaaac gcagtacaca cagcgtgct taccttgacg acgaccactt gtgttggagc 240
agcagtcac tacagccaaa actcttcact tccttcgcc ttgccgtgtt accagcccag 300
ccagcgacgt gggcgtgccg cgacaggggt ttttccccct gggaaacgtt gtgttctggc 360
anatgccaca aa 372

<210> 6802
<211> 284
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A1

<400> 6802

aggcattcgt aagcccagtc gactcgtcgg tgcactcaca gggtatcgtc atacctggat 60
acggttccaa cctcaccgac tcagttcatc ccgttacacg catactctca ccgatgtaat 120
acgaccgcgc ttgggacaca cctccagagg tgggagtata gaattatcac ttcggaccat 180
cagcaggccg attcgtaact aagtatggca cgtccccagc atcgcaatct gcaatcgaac 240
tggacacagc cgtggacgtg aaaaccaca gtggctgtcc aagt 284

<210> 6803
 <211> 353
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-E7

 <400> 6803

 agagccacca tcgatctgca agtctcgcta cgtagcagtg caataaaaaa aagcagccgc 60
 aatggcgagc agcaccatgg ccctctcctc cacggccttc gccggcaagg cagtgaacgt 120
 gccgtcgtcg tccgccttcg gcgaggcccg cgtgacgatg cgcaagacgg cggcgaaggc 180
 caagccggcg gcggcgctcc ggagcccgtg gtacggcccc gaccgctgc tgtacctggg 240
 cccactgtcc ggcgagccgc cgagctacct gacgggagag ttcccgggag actacggctg 300
 ggacaccgag gggctgtcgg cggacccgga gacgttcgcc aagaaccggg agc 353

<210> 6804
 <211> 354
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-E8

 <400> 6804

 ccagcctaaa catcaccgag cataatgaca tccaagacaa gatagcaatc aaccaaata 60
 atgctttcca gctcattgga atgtcctcct gccttgatct atccggattt ttgagaaaag 120
 aggatgtttc tgaaaggaaa atcagatttg catcaaatta ttcccagct tattttattg 180
 agaagattga gagcattgtc agaaaaatgg ggttccaggt acataagagc aacggcaagc 240
 taaaagtgat ccaagactgc aagggactag caaattcaag agggcaagag tcattattaa 300
 tttctgctga ggtgtttgag atcaatgaat ctctttatgt tgtcgaacta aaga 354

<210> 6805
 <211> 338
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-F1

 <400> 6805

cacgcgtcag cgtcagcatc ggcaaatcct ttggctatag gatcaacatt ggtgatgtat 60
 tatgatgaat cacatcaagc gatgttcac tgcgtgtcaa atgggtgggt aggtttgaag 120
 gtcatttgtg gaactctcat cacattgtcc ttcttccgaa aactctttta gagttcgctc 180
 agttcgctag ctttaagcgc tgtgatgcat taagatattc atttgcgcta tcttttgccc 240
 ttgcaatagt ttttgtcgat atcgctgatg caagttccag ctgcatccac ttctttggaa 300
 atgttttagag ttccaaactt tttcgacaat tagatggt 338

<210> 6806

<211> 416

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-027-Q1-E1-F2

<400> 6806

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 gcgagggagg aagaggcgag gagaagatgc agatcttcgt gaagaccctg acggggaaga 120
 ccatcacctt cgaggtggag agcagcgaca ccgtcgacaa cgtcaaggcc aaaatccagg 180
 acaaggaagg gattccccca gatcaacagc gactgatatt cgctggcaag cagctggagg 240
 atggacgcac gctggctgac tacaacatcc aaaaggagtc aactcttcat ttggtcctca 300
 ggcttagggg tggaaccatg atcaaggatc aaactctcac tgggaaagag atcgagatcg 360
 acattgaacc cactgactcg attgacagga taaaggancg tggtgaagag aaagaa 416

<210> 6807

<211> 295

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F3

<400> 6807

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 gaggaatgc aaaggccggg taccccgctc tacaacatca aggctttcct ccctgtcatc 120
 aattcctttg gtttctccag ccaactgagg gccgcaacct ctggtcaggc gttcccccat 180
 tgtgtctttg accattggga catgatgggc tcagatcctt tggaggccgg ctcccaggct 240

gctcagctgg tgctggatat ccgcaagagg aagggtctca aggaacagat gaccc 295

<210> 6808
<211> 351
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F4

<400> 6808

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caattactgc cccaaacaat ggggcacaaa ggaattgatt aagcccgaca aaacacaagt 120
tccttgccctt caaacaaaag gataaaggcg ttaagcaaat taataatggc cccaagcctt 180
aacctaaggc acaggcgctc gaccgtctct tgccgtatca gaggtctgac ttcgaaggca 240
ttttccgtgc tatggatgga ctcccggatga ccatccgact cctggaccct cccctccacg 300
agttccttcc agaagggaac atcgaggaca ttgtaagtga attatgtgct g 351

<210> 6809
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F5

<400> 6809

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tcaggcgatg ttcatcatcg tggatatattg gagggctggt ttggagctca tttgtggaat 120
tctcgtgcca ttgtccttct tgccacagct cttttggtgt tcgctccgtt ggtgagcttt 180
aagcgcttgg attcattaag atacacatct gcgctatcag ttgccctggc agtagttttt 240
gtcgtaatta ctgctgggat tgccatcatc aaactcttca atggaactgt agcgatgccc 300
aaactttttc cagaattaga tggctcttaat tctatctgga atcttttttac agc 353

<210> 6810
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F6

<400> 6810

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aagtttcgca acaggccatt ccctcttttt tatagtttag aagggctata tgaaggtagt 120
gtggctacca gagagttaaa tttcacatca acctttgttg atcttcctcc accttcagct 180
ccattccagg agtgtgtctg gacaaagtct caatcccttg agtactaatt cacttgattt 240
ggatggataa gaaaccacaa gtgtcttcaa tctatcttct gatgttcaat ctgtcccagt 300
caatactaata gaaccactg aagctcaatt tgtcccatct aatcaagaat caagccagag 360
agaaggtggc agtgggagaa agcgtaagc 389

<210> 6811

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F7

<400> 6811

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ggacaccatc gacaatgtga aggcgaagat ccaggacaag gagggcatcc ccccggaacca 120
gcagcgtctg atcttcgccg gcaaacagct ggaggatggc cgcaccctag cagactacaa 180
catccaaaag gagagcaccc tccaccttgt gctccgtctc cgtggtggtc agtaagtcac 240
gggtcgttta agctgccgat gtgcctgcgt cgtctgggtc cctctccata tggaggttgt 300
cgaagtatct gctgttcgtg tcagtgttg ttttaataatg gaccggttgt gttgtgtgtg 360
cgtactaccc agaactatga caaatcaaga ataagtttgt tgtttg 406

<210> 6812

<211> 334

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-027-Q1-E1-G1

<400> 6812

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ggaggagcgg aacattaaga agggggatag ggagatggag gaggcgcgca aggaagagga 120
gcggaaggag gaggcggggg acaggaatac ccaggagccg cagcaaggtc aaggcctcag 180
cctctcactc gccaacggca gcgacagcgg caggtctgca atgttgccga tgtcgaaccc 240
ttcagctaata cccacacagc ttacaatddd ctatgggtga tcagtatgtg tgtatgactc 300
ggtgccacca gaaaaggctc aagcaatcat gctt 334

<210> 6813
<211> 272
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-G10
<400> 6813

gcgtcagatt gagaccaact agcatcatag aaggcagatt attgttgcatt taatggcagc 60
caaaatatttt tgcctcctta ggcaccttgg tctttcagca actgctgcaa cggcgaccat 120
tttcccgcga tgctcgcaga ctcccatatc ttcacgtcat ctcccgatc tcataactgc 180
ggtatcgccct gtaagtgaca actcaactct tcacacctac acgatcgaac acgcaatcat 240
caagtggcaa cttatatttta acaccctga tc 272

<210> 6814
<211> 201
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-E6
<400> 6814

agcccaagca tccgtctaca agtctggatc attaacagtg gaatacagta acacaactac 60
agtagcaatg acggccatgg tattttccac cattgtgctc gttggtcttg ctgtatgtgt 120
tgcgtcggcg accatttttc gtcaagactc agtgactctt atcactgccg ttcttaccgc 180
aaaccttgca gcagtgtccg g 201

<210> 6815
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D2

<400> 6815

aggagaagta caggaggccg ttgtggatca ccaaggcggt ggaaaaccct gtagtgacag 60
tccaggaaat gtcaatgcag tcgacgagca acctgaccat cagatgggcg ttgagaggga 120
agcctaagaa cccgttgttc gcgagcgctg gaggagacgt catcggtccg gtcgagtcac 180
ggttcgctct gaaccagata agcgggcagg tgctggagca ggccgagtc tgggacctct 240
ccgcctcgtc cctccctgcc caggcctact tctggctgtc ccgaagggtc tactccgccg 300
tggagtccgg gaaggacgcg atcgaagccg ccaagagcgc ggcgtcgtct gggctgacga 360
cca 363

<210> 6816

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D3

<400> 6816

acgcgtcaag ccaagcttcg gccaacgcct tcgccaaaggc ttcagatttc cggttggccc 60
cgtcctcacc ttctccgtca cggtcacaat cacggcttgc atcaatggcg tcgttctcgg 120
aggctcccc cggaaccg aaagccggcg agaaaatctt taagaccaac tgcgcgcaat 180
gccagacggt cgacaagggc gccggccaca atcaaggctc aaacttgaac ggtctttttg 240
ggagacagtc cggtatcact gcaggcgatg ccgacactgc gggaaacata aagaaagctg 300
taatctggga agaacacacg ttgtataagt aacggccaaa acct 344

<210> 6817

<211> 345

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D4

<400> 6817

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ccacacggcg cataaccagt cgttcaaggc gcacaagaac ggcatcaaga agccaagcg 120

ccaccgccag acctccacca aggggatgga cccgaagttt ctgaggaact tgagggtactc 180
aaggaagggc aacaagaaga gtggcgaggc tgagtccgag gagtaagatg atggtgattg 240
agtttgtggc gacaaatgca tctcttgtat cgctaagagt cttagctgtg aacttagttc 300
tcacttctgt gtgactgtga tcaaaggact tgtgtatgat caaag 345

<210> 6818
<211> 352
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-D5
<400> 6818

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cgctccctc caggcctact ccacggccct ctccgccttt accgccgcat ggcggtgccgt 120
cgagaccac gcctccaccc tcgactccgc cctcgccgcc cgcttagccg gcttctcgga 180
gctcgagctg atctgctcgg cgatggacgg agccggcctc cgcgcgctacc tcaccgagca 240
cagggacgag ctcaaggatc ccacgcgcgc cctcgacgca gccctccaag ttgcgcccga 300
cccggggctt ctggctctct ccgcggcagc gagtttctgc cgcacgctgc cg 352

<210> 6819
<211> 421
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-D6
<400> 6819

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ggcgctgcgc acagacacac caagcgtcgg caccaatggc ttactaccag gaggtggact 120
actgctcgga ggaggtgagg tcggtggccc cggccggctt cggccgccac ggcgggcgcg 180
tccagcagca cgtcgtcaag gagaagttcg aggaggtcga cacggtctca cgcgccggcg 240
ccaaccacca ccaccacat ggtcaccacg gcggccacgg ctctgtggtg cgcgagacca 300
gggtcgaaga ggacatcaac acctgcaccg gcgaggtcca cgagcgagg gagagcttcc 360
tcgccagggc ctaactgacc gcccggcgcg ccggaatcca ggcccgtccg tgcttgctg 420

<210> 6820
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-D7

 <400> 6820

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 acaagttatc tgagttggca tgtttggcat tataatctcat gtatgagaaa aagcaaggaa 120
 aggattcatt ttggtacccc tacattaagg aacttgaccg acatcgagga agggggcagc 180
 tagctgttga atcaccactt ctatggactg aaagtgaact ggactacctt agtgggaagcc 240
 ccttgaagga tgaagttgtt gctagagatg aggcaataag gagagagtat aatgagcttg 300
 acacattgtg gtttatggca ggttcactat ttcagcaata tccttttgac atacctactg 360
 aggcttttcc gtttgaaat 379

<210> 6821
 <211> 334
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-D8

 <400> 6821

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 aaccacacgg cgcataacca gtcgttcacg gcgcacaaga acggcatcaa gaagcccaag 120
 cgccagcgcc agacctccac caaggggatg gacccgaagt ttctgaggaa cttgaggtac 180
 tcaaggaagg gcaacaagaa cagtggcgag gctgagtccg aggagtaaga tgatggtgat 240
 tgagtttgtg gcgacaaatg catctcttgt atcgctaaga gtcttatctg tgaacttagt 300
 tctcacttct gtgtgactgt gatcaaatga cttg 334

<210> 6822
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E1

<400> 6822

acgcgtccag tccatctcct ctggcgccat caacgcccct tccttcaagg gcgcgcccgc 60
tcgcgcaatg gtcagcaaga ggtccttcac cgtgcgtgcc tctctccgca aggccactgc 120
caccgcccgc gtggccgttg ccgccagcgt cctgcttgcc ggcggcgggcg ccatggccaa 180
ggaggtgctg ctggggcgag gcgacggcgg gctcgtcttc gagcccagcc agttcaccgt 240
caaggccggc gacaccatca ccttcaagaa caacgccggc ttcccgcaca acgtcgtgtt 300
cgacgaagac gaggtgccga gcggcgtcga cgctccaag atctcgcagg aggagtacct 360
caacg 365

<210> 6823

<211> 318

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E12

<400> 6823

agcccaagcg tccgctcaat tcgattggct ccgtgtcgac ctccagggttg agaaggaaag 60
catcgcgagt tcgccatacg gatgggttcc aaagcgcctt tctgtctcac gtcctctctg 120
ctgctcgccg cggcctgtgg acctgctgca catgccaacg atgctgtcga gctcccgcac 180
catggctcag ccttgaagga acatatttct tcaaccaaga ttcttgcccg tctcaagagg 240
ggcagcggac tatgctcggc ctgtgaaaac ttcacgagcg aagccgtcac ttatctcggc 300
aaggaacaga cacaggac 318

<210> 6824

<211> 279

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E4

<400> 6824

caaacgtccg ggtttaactc aatactccaa aaactgacaa gctatctgaa aatggagaaa 60
atgatagact taagtttggg ccttcaacca tgcaaggatg gccagcaacc atggcagatg 120

ctcaatcagc aatgccagat ttgaaaacc agacaacaat ccttggtggt tttgaagggc 180
aaggaagaaa aatccttgcc aaattctgtt gcaaaaaacc gcatggtcaa gtcctcaaaa 240
gccaaagccca ttcaactggt gacctaggca ctgctgtcc 279

<210> 6825

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E5

<400> 6825

cgacccacgc gctcagccca cgcgttcgc ccacgcgatc cgcccagcgt catcagctag 60
atgctgagg cggaacgctg gggtagatat ttcaacgtta acagtggaat accatgtgaa 120
aacagcactg gcaaatcaca gtattggaac gatgtacagt ggcatataaa aaagggttacg 180
tccacatata cgcaggaaac atagtaaagt taaacaaaaa tgttttagagc attgctatag 240
agctcacaat cttgacattt agtcgcatga acacggctgg atatccgata agctcgggtgc 300
tgtgctgtac gcaaaaatat catatgcaac aagggttcacg gtca 344

<210> 6826

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-C8

<400> 6826

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gagatcagaa aaatgcaggc tgccgcaact gccgccgggt tctcggcctt gctgcccgcc 120
aagggcaggc cggcggcaag gaccagggtg gtggcccttg tccccgccac agggaggacc 180
ttctgtgtac ctgctgtctt cgagaccgag gccgcacata tcgactacag ctcaagcgtc 240
tcggtgttcc cgatggaggc ctgcaacctg cttggtggca acgcgtgcaa cgggccccatg 300
ttcccgagg ccaagccgc ctcggcggcg gcggcggcga gcatgagtgt ggccgggggtg 360
gacagggact acctgtccta cgacga 386

<210> 6827

<211> 369
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-B1

 <400> 6827

 gggccgaccc acgcgtcagc ccacgcgtcc ggacaagagc agcgtccatg atgttgctct 60
 tgttggtggc tccactagga tccccagggt gcagcagctg ctccaggact tcttcaacgg 120
 caaggagctg tgcaagaaca tcaatcctga tgaggccgtt gcctatgggtg ctgccgtcca 180
 ggccgctatc ctcaagtggg agggcaacga gaaggcgcag gacctgcttc tgctggacgt 240
 cactcctctc tctctgggtc tggagactgc cggaggagtg atgaccgtcc ttatcccagag 300
 gaacaccacc atccccacca agaaggagca ggtgttctcc acctactcgg acaaccagcc 360
 tgggtgtgtt 369

<210> 6828
 <211> 386
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-B2

 <400> 6828

 acgcgtcagg gatattggaga ggattgaagg gattaaatct cctcctattc aattttgact 60
 aggaggggat ttaatccctt tcaatcccc tcaaacact agtaaccgaa cgtggcctga 120
 gggggcgggc gagtctttat attgaatgaa actacataaa atagcatgcc gtctctgtca 180
 ctggcaatgg acggtgggtg ctagcgcaac tcagcgaca actgtgtgtc ttgatttttc 240
 ttctgtttat cacggcatta gtgccatgcc gttttatgtt acagtgttgt gtgctcgcaa 300
 gcatccgaaa atatgcgtct gagtttaggg ttgggtcaaa cttgtcgaat ttgggggttct 360
 gttataatat gttgagcatg gataaa 386

<210> 6829
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-B3

<400> 6829

acgcgtcaga ttgacataag tactctggct gtggaaagtg aagtggcggc tgagaatgat 60
ggcccaatta acagtcaggt gcatgaaact gtagctctag aaaatgtgga aatgaaagat 120
gatgtttctt ctgctgaaaa tgagcataac agatcgagca gccctgttat tcatttagag 180
gaccactag tgtctttgaa ggatgttgag cagcatggtc caactcctac taaggacttt 240
gttgtagcta acacagaaga ccaacaagaa gccagagata tcagcttgca ggtacaagct 300
gtggattcca tgaaagattg tggcgaagta ccagatggaa caatagaggc ttcgacgaat 360
gatgatgaat 370

<210> 6830

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-B4

<400> 6830

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ttctccttg gcaaaggcgg cggcgcccgg ggctgcgcaa gcggctgcgg gacgaggtgc 120
ggcgcgccat ggtgggcaaa ggcaaagacg gcgagttcgg gttcgccacc gtccgcgagg 180
gcatgccgct ggtgcggtcg acggtgtacg agatgctgcg gatgcagccg cccgtgccgc 240
tgcagttcgg gcgcgcgcgc agggacttcg tgctgcgctc ccacggcggc gccgcgtacc 300
aggtgtccgc gggcgaggtg ctgtgcgggt accagccgct ggcgatgcgg gaccc 355

<210> 6831

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-B5

<400> 6831

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gacgcgatcg acagcgtggg ggtacccctc cgcgacttcg ccaaggacag cgtcgcctc 120
gtcaagcgct gccacaagcc cgaccgcaag gagttcacca aggtggcggc gcggacggcg 180

atcgggttcg tcgtcatggg cttcgtcggc ttcttcgtta agtcacatctt catccccatc 240
aacaacatca tcgtcgggtc cggctaggct tacaggagta cagggcgact agcatgggag 300
tagtgcaata cttttgggag caatagataa cgaggatcct ggtctttcga atagtattgt 360
taatgaaatt tttccgt 377

<210> 6832
<211> 315
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-B6
<400> 6832

agccacgcg tccgagctga tccgtcgtct cccgtcttcc cgacccgggt cccgcctcgc 60
ccgtcgccgc cagatccgac gcgctggatc gccagcggcc tgctgctgtc gatccgacgt 120
gcggcagtct gctcttctg ccgtttact gcgcttgagg tccataatag cacgcatctg 180
ggcgggtcaa gagcaaatg gattcggacg gaagaaggcg ccggtgccgg ctccccctca 240
acgatggcca aggggtccga aaagaccgac gacttcaaag aaggcgtccg aatcgccgga 300
atcccccaag ggtac 315

<210> 6833
<211> 346
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-B7
<400> 6833

agcgggaaac ctctcccccg ttcccctcga agcctacggg ctcggggggc ttcgatcgaa 60
tcgaatcgga tcggatcgga agcatggaga tctcgctcga ggcgtcgtgg gtgggcgtgc 120
agcggcacgg gcaggacctg gcggaccgcc tcgcgcaggg cttctcgggg ctctctctcc 180
acgcgcagcc gccgcagctg ccccatgggt cgccggcggc gctgttgccg cccaagctcg 240
tcatccccctt cgacctcgac ctccccgttg tccccttcgt cgccgggatg cgccgcgggg 300
tcgggaccgt ggacctcccc gccgtggccg tctcgtcgtc cgtcga 346

<210> 6834

<211> 365
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-027-Q1-E1-B8

 <400> 6834

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 cgccggtgct gtccagtcta ggggttcggc cctcgcccgc cgatccgtcc ccccgccgg 120
 ccatgtcgaa gcaaggaggg aaggccaagc cgctgaaggc gccaagggtc gacaagaagg 180
 agtacgacga gagtgatctt gcttatttgc agaagaaaaa agatgaggaa aaggcgctga 240
 aggagctgaa ggccaaggca cagaagggcg caattggagg ctcggtctc aaganaagtg 300
 gaaagaaatg agcattgccc acccaccat ctccaaaaca cctaagagaa cgataagaca 360
 gctgc 365

<210> 6835
 <211> 306
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-C1

 <400> 6835

 agaatgttgt tgagctatgc caaacagag tggttgtctt cgataacgtg actgaagacc 60
 gaaggctcca agcgcagcaa cttgacaaat tgctcgatgt agtggattca gtttgtgcaa 120
 aaaatggagg aaaaccattt tcagatcaaa tgttcactag catcaaggag gtgcatgata 180
 gagaaaaaga ggtgcatacc tcgggatatt cagatgagca gatatctgaa ttgaaaaagg 240
 agattcatag aactaaggaa gtaaaagctt gggcaaataa ccaacatggt caaggaaaag 300
 ttaaac 306

<210> 6836
 <211> 182
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-C10

 <400> 6836

acgcgtcaac ccaagcgtcc ggccacgggt tcgtcatcgg cctccgtctc cttcccgccg 60
 ccgcggcatt cctcgtcctc ctcttaaggt tggagtgtct aaattcaatt gcgattaccg 120
 ggaggagttg tctgatgcca catgccgggg ctgcgtccgg gcccatggag gtccgtggca 180
 ga 182

<210> 6837
 <211> 277
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-C4
 <400> 6837

ccaacccccg aaaggaactt tacttcgcct cccaaaatga ttgttattcg ttcctttgat 60
 gttaacaagc ctggttcaga ggttgacgaa attagagggt gtgtagctgg tggcagtatc 120
 ctcaggggag ttcttaggggt gaaccagaag attgaagttc gccctggcat tgttatgaaa 180
 gatgagaatg gaaacattaa gtgcacgcca atctactcaa ggattgtctc actctatgct 240
 gagcataatg agtccaatt tgctgtccca ggaaggc 277

<210> 6838
 <211> 317
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-C6
 <400> 6838

gaccacgcgg tcaggcccaa ctcaaatttt acatcaaggc cattcgccgg aaatgggttc 60
 ggacctgact tacggcgggc gaaccttgcc gcaagggttc gcttcaaacg gtggggaata 120
 ctcccggaat tcttcaaagc cgctctctgt tctcgccgc gccgcgcgat acgccgccgc 180
 cgaacagcgc cctgtcttcg ctctcgcggt tatgtcttct ggtggcgcta tcttcatttt 240
 ctcttcgccc tccactttat cgccgtcaga ccccgccgcg tcggtcggct tcaaccatct 300
 tgccatcagg gggcact 317

<210> 6839
 <211> 391

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-C7
 <400> 6839
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 tggccatatt atatttacgg ttgatatacc attgtactta caagaaattg ttagaaaaatg 120
 atagggaagt tcccctacca tatatgtaat ataaatatcc aatataagaa cgaaatagca 180
 tcacaagata tgtaccaact cctaaatagc agatgttcaa caagaaattg tggaaccatg 240
 tttgtatcac taacttatat gatttttgcca tatggaaaac caaggaaaac tctgccaaaa 300
 ctgtattttt ccaagcatct acttgtttga gatttggtt tacattttat ctttttgttt 360
 gcttccccta attccccttt gggcctaatt t 391

<210> 6840
 <211> 315
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H3
 <400> 6840
 ccggccaagc gtccgggtgc tcaaggatgt ggggtaccca gttaaactag gtagccgcgt 60
 ggcaaccgcc ggccggcgtag ctgtcaaact ccacgccgct catcccatct aggatctgag 120
 aacaacgtaa ggggaggata tcgcaaacia ggccaccgac aacgagtggg cagacgaacg 180
 aacaaagcgt tgctacatac taccctctca caatgtaaag tttaaatttca caccatcct 240
 gttgctacat actactatag tttctagaat tacaggtttg attaaccttc agattaatct 300
 acatgtatag ccctg 315

<210> 6841
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H5
 <400> 6841
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaa aaaaaaaat aaaaaaaaaa aaaaaaata aaaaaaaaaa aaaaaaaaaa 120
 caaaaaaaaaa gggaggcctc ccaaaagggtt caaactttat ttaaccgtgc atgcaacttc 180
 aaaccctttc aaaattgtcc ccaaatttca tttcaggggc cttcttttaa aaaattcttg 240
 actggaaaaa ccttgggggtt tcccaattta accccctttg cagcaaatac cccttttcca 300
 aattgggcta attccaaaaa agccccaaac ttttcccctt cccaaaattt tcccaccctt 360
 aatggcaaaa gggaaccccc ctttaaaggg ccattaaacc ccggggggtt 409

<210> 6842
 <211> 423
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H6
 <400> 6842

aataagacga cttgtttcat tgattcttga agagatcgag cttcttttgc accacaaggt 60
 cgaggatgtc ttgcaactgc ggatcaagct gcggctgcgg ctcaagctgc aagtgcggca 120
 agaagtaccc tgacctggag gagacgagca ccgccgcgca ggccaccgtc gtcctcggcg 180
 tggccccgga gaagaaggcc gcgcccaggt tcgtcgaggc cgcggcggag tccggcgagg 240
 ccgcccacgg ctgcagctgc ggtggcaact gcaagtgcga cccctgcaac tgctgatcac 300
 atcgatcgac gaccatggat atgattatta tctatctagc ttgtggtggt ggttgaacaa 360
 taataagcga ggccgagctg gctgccatac ataggtattg tgtggtgtgt gtgagagaga 420
 gag 423

<210> 6843
 <211> 301
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H7
 <400> 6843

accgccttcc tcttccagtc cccgcgcgcg agatcgccgc cccgtgtggg ccctagatcc 60
 cgatggcctc gcgccgcgcg accctgctca aggtcatcat cctcggcgat agtgggggttg 120
 ggaagacttc cttgatgaac caatatgtga acaagaagtt cagcaatcag tacaaggcta 180

cgatcggcgc ggatttcctc accaaggagg tgcagttcga ggacaggctc ttcactctgc 240
 aaatatggga cactgctggc caggaaaggt ttcagagtct cggcgttgca ttctaccggg 300
 g 301

<210> 6844
 <211> 93
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H8
 <400> 6844

tccggggccga tccacacgtc caccgactcg tcggtccgtc gacattgcgt ggaatacgcg 60
 ggcgtattca catatggatt gcccatcaca ttt 93

<210> 6845
 <211> 394
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H9
 <400> 6845

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 tccccgggcc tccgctcgcc tctctcttct tctctcctcg ctgagtcgcc gccagccatg 120
 aacaacctcc tcacggattc ctttgagctc ccccggcggg actcctcaag agatgcagac 180
 attgaaatgg gaatgcatca agctgatgct tcagactact taaaagattt cttgaagaag 240
 gtcgatgcaa ttgagagttt aattgcaaag ctgacaaatc tattgaataa gctacagact 300
 gcaaatgagg aatccaaagc agttacaaaa gcaagttcca tgaaagcaat taagcagcgg 360
 atggagaaag atattgatga agtggggaaa attg 394

<210> 6846
 <211> 312
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-A1
 <400> 6846

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 gccatcggaa acagtacatt tgacgtctga ctaaaatctg caatttcacc atggtttttt 180
 aagagctatt ggattgagaa tgttttaatg ccgtatacga cacctgtcaa gccgggtctc 240
 atacttctct ggatttgga atcacggatc tgcaggcca tcacatggat gtgcatccgc 300
 taaaaattct ac 312

<210> 6847
 <211> 327
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-A11
 <400> 6847

gccgagccac gcgtcagctg ggccatccgc cgggctattg ctctgacagc ttgcccagagg 60
 acgtgcataa gtacgtagat agatacatcg atcgctagct agctggctac catgggtgtcg 120
 ctcacgtcgg cggtcacaa cgccccatcc atcacagccg cactcgctca cgcagtggtc 180
 agcacgatgg ccatcaccat gtctgccacg cttcgaaaag ggaatgacac cgccactgta 240
 acggttgccg ttaccgtggt ggtagcgtc cggcgagcca tgggccacga catgggtgcat 300
 ggacgcaagg cagggccgac tcgactg 327

<210> 6848
 <211> 84
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-A3
 <400> 6848

gcacgcgtca acatctcccc cgcaccgtaa ccctagcagc agatcggcca tggaagagct 60
 gggcgacctg cgtggggaca agcg 84

<210> 6849
 <211> 359
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A4

<400> 6849

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aacggctggg ctccaagccg gggccaatcc tcaagaagaa cttcccggcc ggcgttcttg 120
gcaagggccc cggccaaaaa aagaaccctg cgccggcgaa cggcttccaa aacaagggaa 180
gtcccccccg ttaggtcaac gggatcaaga cgagcacggt gggctctggga tgtgagggcg 240
tcaccgggca agtcacggag gtcaacaagg acaccttctg gcccatcgtc gatgccgccg 300
gcgacaaggt cgtcgtcctc gacatgtaca ccgaatgggt cgggccttgc aaagtgatg 359

<210> 6850

<211> 223

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A5

<400> 6850

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gaatcatggc gtccgtcaac gcccgcgccc cggtagcggc ccttcgccccg ttgacggcat 120
cgctgaagtt cttggcggac ttccttggtc actctaaccg ccaactggcg aacacgtcta 180
ccatgaaggg cattgtcaag gcagatgcc aaggcgaatg gct 223

<210> 6851

<211> 346

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A8

<400> 6851

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gaggggcat ggcggcggct gatgtggagt accgttgctt cgtcggcggg cttgcctggg 120
ccaccagcaa cgagtcgctg gagaatgcct tcgcctccta cggcgagatc ctgcactcca 180
aggatcatcac cgaccgggag acggggaggt ctgcgggctt cggcttcggt accttctcct 240
ccgagaactc catgctcgac gctatcgaga acatgaacgg caaggagctc gacggccgta 300

acatcacggt taaccaggcc cagtcctcggt gcggtggcgg tggcgg

346

<210> 6852

<211> 378

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-H2

<400> 6852

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ccaaggtacc ggcttggaac ccccggcggc ttacctgtca aattcaaggc ggctcatcca 120

accaaggttc tgaaaccatt ttaagggaag gatatcccaa acaaggccag cgacaacaat 180

tgggcaaacy accgaacaaa gcgttgctac atagtactct ctaagaatgt aaagttaaata 240

ttcacacca cctgttgcta catagtagta tagttttatg aattacaggc ttgattaaac 300

ttcaaattaa tctacatgta tagccctgcc cagatttaac tatattggga ccgtattact 360

taccgatcaa aanaaaaa 378

<210> 6853

<211> 314

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-B1

<400> 6853

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acatattatt gtcactgtca gttttggacg catccctctg gaagataagc ctttgcagct 120

taacttggcg gcagatgacg ggacgttggtg acccacaata gttgacgcat gttcatgtag 180

tttaagtgtt ctcaagttccc acgaccaaata tgacagttac cacatggggg tgatcatgctg 240

attgcaaatt tctacgtggg atacgtgcat tggtagccac ggattcaact ttattccgac 300

ctaaaacaac cttt 314

<210> 6854

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F4

<400> 6854

aaactccgcc ggccctcccc ccaacgggtcc ctttcccccc caaatccggc gggaaggaaa 60

atggccggct tttccaacct caaggcgggc aatttcccct tcggcttcac aacttggggc 120

gcaacaatca ctctctttgt cctgccggac caaaagggtg gccatagggg gttaattcag 180

gttgatatggc cggttaaaaa tttcgtcggt ggcggtgact cgccctacat cacgttgtac 240

taccacagct tcgatggaaa acaaggtttc ccaggcgacc tggacgtgta cgtgacgtac 300

cagctggcgg cccctacgt gctgcgggtg cacatgaacg cgacggccgt gaacaaggcg 360

accccggtga acctggcgca gcacacgtac tggaacc 397

<210> 6855

<211> 212

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F8

<400> 6855

acggacgcgt gggaaaaatc acacaaccac aaaatcaaaa ttaaaaatct tccacaacag 60

aggaaacaag tcaattgaac catggaaaga aatcaaaggg cagctcctct ataagattca 120

gccttagcta ctccatcatg aaacgtcaca tgtcttccaa acagttcgta atttaagtta 180

tcaggccgtc cttttaaacg ttcctaacgg gg 212

<210> 6856

<211> 261

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F9

<400> 6856

aggcaacgca tcggtctcgt ctccaccatg ttcacgtcgg gtctggtggg cgaccagttc 60

cagctcctgt acatgcagca cgaacacggc ggcaggccgg gcacccctcg cgacgtcttg 120

atgttcgtcg gcgtgcacct ggagatgatc atcaccgtcc tcgtcactat gcttgtgcag 180

cccatcgtgg tctatgatgt cgtcgacgcc tagctccatc agatcaagtg gagcagctcg 240
attatgtggg cgcagatcgt c 261

<210> 6857
<211> 367
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-026-Q1-E1-G1

<400> 6857

cgggccaagc cacccttcga gaggaacccat ttaaccagg ttaatccaac aggaaaaatt 60
tttcgaagga accctttccg gccttgcca aattaaaaaa cccctggga aaattcacca 120
atggcccttc ctcccttggc catttaattc gggatgaactt tccttagtta ccttcacca 180
aaaggttcca aatacccaat ccaattataa agaactatga cgtcacanag gggcagacca 240
acttcagaaa ttcacgang aagtgaacaa gatcgatgag tacacacaga ctaaactgga 300
cccgagttt ttgcttgagc anacaaagaa gcggcttggg attgcttaaa gcctgtgacc 360
aaggacg 367

<210> 6858
<211> 400
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G11

<400> 6858

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gatcgacccc tcgcgctcgg cggcgctgcc tgcaggccag gtccgggttc atcgcatgtc 120
gccgcccgtt ggtgcttccg tgcctggga gggagcttcg tttatctttc tgaccgacat 180
gtaatgtgca gtgctaggac tgctgctgca acgcttcgag atgcaaggac gtcgttccag 240
caggacgatt ctgtttggac tccggaactg cggtttggag ttctgaaggc gaataaattg 300
tgatgaaacc tgagattctt tgcctgaaat acggaatgta tcgcttggac actgtatcgc 360
gaattgggtg atgagcatgt tgcattccgt tgcccttttg 400

<210> 6859
<211> 286
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G2

<400> 6859

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gaactggttt gtaaaacttg tttccccaac cttgccccca aatcgggcaa ttttttgggc 120
cccgggcaat tcactttaaa aatccaaatt tgaattgttt aataaaggaa attggttccg 180
gaacggaata agtcccaaatt gatttaccaa agttcaataa taattccgcc ttaaaattaa 240
atttttccaa aagtttggtta cttggaaatt aatgccggga atttta 286

<210> 6860
<211> 420
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-026-Q1-E1-G3

<400> 6860

ggccaagcca gccttcgacg ggacgtcagc caaccattta ctccaccaat ccaaaattgg 60
gaaattcaac accatgaagg tgcggttcgt tgcccttgcc ccccgggggc tcgctgcaac 120
cgccgcctca attaaaaccg gcggtgtgtg ttgcaaaaca caacggtttc atcaacggcc 180
tcggttctat atgccgcctc cgttctatct gccgccgag cagcagccgc agccatggca 240
ataccccact caaccaccgc agctaagccc gtgccagcag ttcggatcct gcggcgtcgg 300
cagcgtcggc agcccgttcc tgngccagtg cgtcgagttc ctgagggcac agtgcagccc 360
ggcggcgacg ccctacggct cgccacagtg ccaagcgctg cagcagcagt gctgccacca 420

<210> 6861
<211> 257
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G4

<400> 6861

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cagggccaga ttaaccggca accacgggaa caattccggc aacaacaagg aaaggaaggc 120
caggaaaagg aagaaggaga agaagaagca cggcgagggc cacgaccacg acggcggcca 180
cagtagcagc agcagcgaca gcgactgaga tctggtgtcg cagcacaggt gcaacacatg 240
tatgcttgct ggatgga 257

<210> 6862
<211> 349
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-026-Q1-E1-G5
<400> 6862

agaaaagggtt gatgtattct cttttgggat tgttctctgg gaactgctaa caggagaaga 60
gccatatgca gatttacatt atggtgttat aataggtggc attgtgagca aactctacg 120
gccgccagtg cccgactcct gcgaccccca gtggagggtca ctgatggagc aatgctggtc 180
aacagaacca tctgagcggc caaacttcac ggagggttgcg aataggctgc gctccatggc 240
agcatcccag aaggtacaac aactactaagg gaacaccacc ggcacgcaga atttgtccca 300
gggcagcatt cagtcaaact tgcaggttac atccatgggc cgcaaattc 349

<210> 6863
<211> 88
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-026-Q1-E1-G8
<400> 6863

aacacgcgtc cgcggacgcg tgggcggacg cgtgggtaga actagtccca agatattagg 60
aatatatcag gttaaggaga ttagacat 88

<210> 6864
<211> 403
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-026-Q1-E1-G9

<400> 6864

agcggacgcg tgggggacgg acggtgctgg catcgccaat tcaactccgc atctgcatcg 60

gcagcgcgcc agtccatag tgtaggagga gatggcgctc acaagaatcg gtcttgctgg 120

ccttgcggtc atggggcaga accttgccct caacattgca gagaaagggg tccccatctc 180

tgtgtacaac aggacaacct ccaaggtgga cgagaccgtg cagcgtgcca aggcagaagg 240

aaaccttccc gtctacggct tccatgacct cgcgtccttt gtgaagtcca ttcagaagcc 300

acgggtggtg atcatgctcg tcaaggccgg cgcgccagtt gaccagacca tcgcgacgct 360

cgcagctcac tttgagcagg gcgactgcat catcgatggg ggg 403

<210> 6865

<211> 419

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-F3

<400> 6865

ttcgacaaa ccttcggcca agccttcggg aaaattgttc cttcccttcc caaagacaaa 60

caagcgaaca caaaacaaaa aagcttcaaa ccaaaaaaac caatccaatt attgggaagg 120

gttccttctt ccaaaaaaat ggggttaaaa aaggggcaat gaaccccca ggaggacaag 180

gtcttgttcc ccaaaatcaa aaccttcggc caaagcaact ggcgcgcgct gcccaagcaa 240

gccggcttgc tgcggtgcgg caagagctgc cggctccggg ggatcaacta cctgcgcccc 300

gacatcaagc gcggcaactt cagcaaggag gaggangacg ccatcatcag cctccacgag 360

cagctcggca acaagtggtc cgccatcgcc gccaggctgc ccgggcggaac ggacaacga 419

<210> 6866

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-H11

<400> 6866

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ctactcctag cattgtcctt cacctggaaa gctctggcac cttattctgg tactcttgct 120

gttggttgga ctgttctgta cgtgctgtca ttgctctag gagcgggccc tgttccagcg 180
ctacttcttc ctgaaatatt tgcctcgaga ataagggccaggctgtcgc attatctcta 240
ggcatgcact gggatatctaa ctttttcatt ggcctgtact tctgagtgt cgtcagcaag 300
tttgggatca gcaacgtgta tctgggattt gcatcagtat gtgcccttgc agttctgtac 360
atagctggga atgtggt 377

<210> 6867
<211> 411
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-026-Q1-E1-H12
<400> 6867

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cctccctcct gccgggtcct taataaagag caccagcgca aggtgagccg ccagcttgcc 120
ccaggttggt agagcgagcg agaagaaggc aatggcgggc gagagcttcc tgttcacctc 180
ggagtccgtg aacgaggggc acccagacaa gctgtgcgac caggtgtcgg acgcggtgct 240
ggacgcctgc ctggcgagcagg accccgacag caaggtggcc tgcgagacct gcaccaagac 300
gaacatggtg atggtgttcg gcgagatcac caccaaggcg agcgtggact acgagaagat 360
cgtgcgcgac aactggcgcg agatcggggt cacctccgac gacgtggggc t 411

<210> 6868
<211> 118
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-026-Q1-E1-D4
<400> 6868

ccttcgaatc cactggccgc caaggtggtc ccgcgaagcc ggaatggggg cttctccttg 60
tccttgggca acggattgcc gccaaaaaca atggtgcccc caacgaaggc caaccact 118

<210> 6869
<211> 273
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D8

<400> 6869

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gccgcagacc caggtgctgg cgcacgccgc cacgggcgcc ttctcacc actgcggctg 120
gaactccgtg ctcgagagcc tcgtctacgg cgtgcccatt gtggcgtggc cgctctacgc 180
cgagcagagg cagaacgccg tgctgctctc cgacggcgtc ggcgctgcgc tccgggtgcc 240
cgagtcgtcc aagcggaggg agattatcgc gga 273

<210> 6870

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E11

<400> 6870

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cgccggccag ccaaggett g cagctgaagc tgaaagacgg ccgccccgc gcgccaccaa 120
ccggagtccg aactccggag aagcgagctt gctttctttc atgagctttc gttcttgaat 180
ctacagtcta caaccgacct cagacccctt gctacctgca cctctgtaaa ataacgccgt 240
cgccgtcgtc gccctctccc tttctggtgt gcgtgtgacg cagcgatctc tgctgcagct 300
cttgacgtct gaaccgtagc tctctccgct ttgagccggc gcggggcgcg ggcctcacgt 360
tccagctgcc gcattgcacg tggtcagaga aagcggacag aacagaaca 409

<210> 6871

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E12

<400> 6871

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agcaccgcgg cgccggcggg cgtggggaca gagccctcgt gatcgatccg tccgtgggat 120
ctcgcgcacg ccaggattgg agagccgcgg cctccccccg cccaaccag ccatgggttc 180

ccgcgcggat cgcggtcttt agacgcggag gaggagagag acagggggag gggaaggccg 240
 aggcctagga ggcgtggtgc agcgcgcgag cgcgttcggt cggcatggaa cagaacgacg 300
 gtcgttcct cgccgtgca cgcctctccg gcggcgccat ccaccaccat cgccaccact 360
 ctgcgccggg ctgaggctct ggccgtgtcc acgggggtgga tcgggaaggg gct 413

<210> 6872
 <211> 61
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-E2
 <400> 6872

atttcgcggt tcgcgtttcc ctcccttttc tccggtcctt gggttttggc tgttcccgtc 60
 c 61

<210> 6873
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-026-Q1-E1-E3
 <400> 6873

ggtggtcccc cggaccggc aatggcctaa cggcggttc.cccaaccttc ttccaacctg 60
 ggctctctc ctgtgaacca ccaacccgc agcagcacgc aaaacgcctc cttgccatag 120
 cgcctcacga aagcatcgca gcagctaggg aggangagag ccacttgct caagagctcg 180
 ctgcagcggg caataataac gaggcggcg gcggcaggac gaggacgtgc gcgctgccga 240
 cgtgggcgct catcggcggc atcacggtgg gcgtgacctt ggcgctggcc ctgtccgcgg 300
 ggccaggccc cgccctggcg ctggggccag agggccccct gntggaggag ttctgggaca 360
 acatgcggcg gtacgcgctg ta 382

<210> 6874
 <211> 302
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E4

<400> 6874

aaaccttccc cggcccccttg gaaaaaaaaa acacaaaaaa aaaaaacaaa aaaaaataatc 60
 taaataaaaa caacaatcaa taaaacacca atcaaaacta attaacacat tactcaaaca 120
 tcaaaaaata aaaaaaaggg cggccccctcc aaaagtttca aacttttctt ccccttcctt 180
 caaatttaaa ccctcttcaa aatttcccc aaatttcatt tcccggccct tttttttaa 240
 acttcttaat ggaaaaaccc tcttctttcc caactttacc ccctttaaaa aaaatcccct 300
 tt 302

<210> 6875

<211> 153

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E6

<400> 6875

gacccacgag tccacccacg cgtccgcgtt gacatctgtt tccgtgccgt tactgttcac 60
 tgcgcacatg agaacctcca ggcagggtccc atatcggctg tcgaggactc tgttgggctg 120
 gcacgcttca tcattgagga aaatgtcagc atc 153

<210> 6876

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F10

<400> 6876

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 cgatctcctc cagggcgatg gccggcacc ccatcaaggt gggctccttc ggcgagggcc 120
 gcatcaccat gcgcaagacc gtgggcaagc ccaaggtggc ggcgtccggc agccccctggt 180
 acggccccga ccgcgtcaag tacctcggcc ctttctccgg cgagcccccg agctacctca 240
 ccggcgagtt ccccggcgac tacggctggg acaccgccgg gctgtccgcc gacccccgaga 300
 ctttcgcaa gaaccgcgag ctggaggtga tccactcccg ctgggcatg ctgggcgcgc 360

tcggctgcgt cttccccg

378

<210> 6877

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F11

<400> 6877

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gggtcagggg gtagatacat cagtaacggg aagctgttgt ccagacggcc tcgtggaatc 120
gattccaaga agaggctctg gactaacgtc cttcttgctc ttaatgtcct ggcttatgtc 180
gctcaggtag catcacaagg aaagcttctt atgtggggag ccaagatcaa cagtctgatt 240
gatagagggc aattttggcg tttggcaaca tcatctctac ttcatgcaaa tctcacccac 300
cttgcatcca attgtttctc tttgaactct attgggccca tggttgaaat gttaagtgg 360
cctagaagat atc 373

<210> 6878

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F12

<400> 6878

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ttagaatacc ttgaggagcg tcgcctcaag gatttggcca acaagcactc tgagttcatc 120
agctacccca tctccctgtg gactgaaaag acaacggaga aggagatttc tgatgatgaa 180
catgaggaag agaagaaaga cgctgaggag ggaaagggtg aggatgttga cgaggtgaag 240
gaacagaatc aaaactagaa aaagaagatc aaggagggtt ctcacgagtg gtcattgatc 300
aacaagcaga agcccatctg gatgaggaag ccagaagaga tcacagagga acaatacgct 360
gccttctaca aaagcttgac aaatgactgg gaggaacat cgggctgtga tccacttctc 420
tgtggagggt c 431

<210> 6879

<211> 318
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-026-Q1-E1-F2

 <400> 6879

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 gcccaaaaag aatcccaatt ggaaaacctg gaaagggtta accgaatttg gtcaaaccgc 120
 gaaaaagcac cgggccaag gcggaaaaaa aaaaacctcc ggcgggaaaa atttgaaatt 180
 gcaaaccggg ataatgttta acaagaagcg gatgcatctg agcgtgatga cagcataaat 240
 gatggggaaa tgaaaccaga tgcatacctc gacagttcag aaatggcgta naggtgggtan 300
 gagggttggg aggcactg 318

<210> 6880
 <211> 70
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-B8

 <400> 6880

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 aaatcctcag 70

<210> 6881
 <211> 375
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-B9

 <400> 6881

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 tccggggctt ccgggctcga ctctgaggac accgcgctca cgctcaccct ccgcctcccg 120
 ggctccgcgc ctccgcgcgc cgccgcgcgc gcggcttccc tgtccctctc ctctcgtcg 180
 tctccgcct tccccgacct cgaccgcaag cgcgcctcct ccgacgctga ccccgccgc 240
 tctcccccgc tcgcgcgctc ctccgacgct gcaccggcac ccaaggctcg tgtgggtgggc 300

tggccgcccg tgaggtcgta ccgcaagaac gcgctcgccg acgccgcggg ctccagcaag 360
gccgccaagt tcgtc 375

<210> 6882
<211> 255
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-026-Q1-E1-C1
<400> 6882

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caccagcatc agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga 120
gctcgggtctg gcgacccgtc tgctccccc cagcgacctg gtgaaatatg cagagaactg 180
catgtacact cccgtctacc gcaactaccg gtaatgctgc cgggatcaat ttgccgtaa 240
taaaaaatct atcaa 255

<210> 6883
<211> 401
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-026-Q1-E1-C10
<400> 6883

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agtcgttcgt ccagctaact gcactgcact gcactgcacg caatggccac cacggcgacc 120
gaggcggcca aggctgcacc ggcgaggag cagcaggcca acggcaacgg caacggcgag 180
cagaagacgc gccactccga ggtcggccac aagagcctgc tcaagagcga cgacctgtac 240
caggtaaaca agctgagcgc aatgagtggc tgaatctgac cgggatctga gtctctgacc 300
gcgggggaag aatgatccgc agtacatcct ggacacgagc gtgtacccgc gggagccgga 360
gagcatgaag gagctgcgcg agatcnnacg caagcaccca t 401

<210> 6884
<211> 184
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C11

<400> 6884

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 caacaacagt ttctgccatc actgagccac cttagccgtgg tgaaccctgt cacctacttg 120
 caacagcagc tgcttgcatc caaccactt gctctggcga acgtagctgc ataccagcaa 180
 caac 184

<210> 6885

<211> 407

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-C12

<400> 6885

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 cagcgtcagc tccagcaatg gctgcctcca ccatggcgat ctctccacg gcgatggccg 120
 gcacccccat caaggtgggc tccttcggcg agggccgcat caccatgcgc aagaccgtgg 180
 gcaagcccaa ggtggcgggc tccggcagcc cctggtacgg ccccgaccgc gtcaagtacc 240
 tcggccccctt ctccggcgag ccccgagct acctcaccgg cgagttcccc ggcgactacg 300
 gctgggacac cgccgggctg tccgcccacc ccgagacctt cgccaagaac cgcgagctgg 360
 aggtgatcca ctcccgtgg gccatgctcn gcgcgctcgg ctgcgtc 407

<210> 6886

<211> 418

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-C2

<400> 6886

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ggccagacgc gcaccgctgg gcgatggggt ggacttggcg gcaacgtccg gaagctcgat 180
 cttggcgacg ctgaatacgt caaggaagtt tctggaacgt acggcgcatt cgaagggtgcg 240
 actaccctga cctcgttgag gattgtcacc agcaccgcca gagcttgggg gccatggggc 300
 atcnagagcg ggacacgttt ctgcatcanc ggcaccatcg gcagcagcat cgtgggattc 360
 tatggacgcg cgacgaacag gctcgtcgct gcgatcggtg tctacctgcg ccaacttt 418

<210> 6887

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C4

<400> 6887

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 ggaaattaga aaagattggc aaggatggcc catccaaca aaatttaa gcaattggaa 120
 tcaaaacagt tgaaaatttc ccccggttc ttgtaaggga tcaccagaga ttacgtagca 180
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<212> DNA

<213> Zea mays

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 <213> Zea mays

<223> unsure at all n locations
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